The Maryland 2005 HIV/AIDS Annual Report

Department of Health and Mental Hygiene

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AIDS Administration
Maryland Department of Health and Mental Hygiene

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NOTE: Reporting

There is a substantial lag time in the reporting of AIDS cases to the state health department. By the end of a year (i.e. December), we predict that 58% of AIDS cases diagnosed within that year have been reported. By the end of the first quarter of the following year (i.e. March), we predict that 79% of AIDS cases diagnosed in the prior year have been reported. By the end of the second quarter of the following year (i.e. June), we predict that 89% of AIDS cases diagnosed in the prior year have been reported.

This Annual Report uses data reported through the second quarter of 2005. The 2004 measures, which are expected to be 89% complete, are presented in order to give a better and more recent picture of the disease incidence and prevalence. Incidence data (newly diagnosed cases) and prevalence data (living cases) are common measures of disease. Incidence data consist of cases diagnosed in 2004 and prevalence data include persons living with HIV and/or AIDS on December 31, 2004.

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INTRODUCTION

Acquired Immunodeficiency Syndrome (AIDS), the advanced stage of disease caused by the Human Immunodeficiency Virus (HIV), has been at epidemic levels for the last two decades in the State of Maryland. Through the end of 2004, Maryland has recorded a total 27,781 AIDS cases, 14,994 deaths among AIDS cases, and an additional 16,342 HIV cases who have not developed AIDS.

This report describes the epidemiology of HIV and AIDS in Maryland. Epidemiology is the study of the distribution of a disease or a physiological/psychological condition in human populations and of the factors that influence this distribution (Lilienfeld, 1980).

Chapter One describes HIV/AIDS disease. Changes in the diagnostic criteria of clinical AIDS diagnosis are reviewed. Annual figures are presented for: reporting lag time by quarter-year, incident (newly diagnosed) HIV and AIDS cases, deaths among HIV and AIDS cases, and prevalent (living) HIV and AIDS cases. Additionally, maps of Maryland that illustrate HIV and AIDS incidence and prevalence rates by county are provided.

Chapter Two explains the purpose of disease surveillance. Data sources for Maryland HIV and AIDS surveillance are also described.

Chapters Three and Four present incidence and prevalence data for Maryland. Distributions of the Maryland population, 2004 HIV cases, and 2004 AIDS cases are compared by gender, race/ethnicity, age group, exposure category, and county.

Chapter Five presents HIV and AIDS trends in Maryland. Proportions of cases by demographics are plotted over time. Incidence rates by race/ethnicity for males and females and relative incidence rates by race/ethnicity are also examined.

Chapter Six compares national AIDS case reports to Maryland AIDS case reports by gender, race/ethnicity, and exposure category for males and females. The Maryland AIDS case report rates and the Baltimore-Towson metropolitan area AIDS case report rates are compared to those of other states and metropolitan areas in the United States with high AIDS rates, as well as to neighboring states and metropolitan areas.

Chapter Seven describes HIV testing in Maryland at publicly funded Counseling, Testing and Referral (CTR) sites. The numbers of anonymous and confidential tests per year are compared, as well as the percentage of those tests that were HIV positive. Distributions of the demographic characteristics of individuals who tested confidentially and anonymously at CTR sites in 2004 are compared to the demographic characteristics of the Maryland general population.

Chapter Eight discusses the epidemic in Baltimore City, where half of Maryland's HIV and AIDS cases are diagnosed consistently. Tables by ZIP code and demographics are presented.

Chapter Nine describes prevention and services planning, implementation and evaluation of prevention programs, and fund allocation for HIV services in Maryland.

Chapter Ten provides fact sheets on chlamydia, gonorrhea, syphilis, hepatitis B and hepatitis C in the context of HIV co-morbid infections. Special population fact sheets are also provided.

Disease Measures

There are several measures used to quantify disease. Definitions of the measures used to quantify HIV and AIDS in this report follow.

Cumulative - The total number of occurrences of disease throughout the history of the disease. In this report, the cumulative AIDS case count includes all cases diagnosed, whether newly diagnosed, previously diagnosed or deceased, from 1979-2004.

Incidence - The number of new occurrences (i.e. diagnosed cases) of disease in a given population in a period of time. Incidence is often expressed as an annual measure. In this report, the incident case count includes all HIV and AIDS cases newly diagnosed in 2004 in Maryland.

Prevalence - The number of people living with the disease in a given population at a designated time. This report presents the number of people living with HIV or AIDS on December 31, 2004.

Proportion - The number of occurrences of the disease within a specific group relative to the total number of occurrences of the disease. For example, males represented approximately 2/3 of all incident AIDS cases in 2004 (827 male incident AIDS cases divided by 1,293 total incident AIDS cases equals 0.640). Generally, proportions are presented as percentages, for example, 64% of AIDS cases in 2004 were male.

Rate - The number of occurrences relative to a standard quantity. For example, on December 31, 2004 there were 8,700 living male AIDS cases and there were 2,557,794 living males in the Maryland population. Therefore, the December 31, 2004 prevalence rate for male AIDS cases in Maryland was 340.1 per 100,000 males (8,700 male AIDS cases divided by 2,557,794 males in the Maryland population, all multiplied by 100,000). The use of rates rather than numbers is essential for comparing populations at different times, different places, or among different categories.

CHAPTER 1: HIV/AIDS DISEASE

AIDS is the advanced clinical stage of HIV infection and is usually characterized by severe immune suppression and the presence of opportunistic infections (OIs). HIV infection is determined through a test, usually performed on blood. AIDS is defined by either one or more of several AIDS-defining OIs or a low CD4+ T-lymphocyte cell level in an HIV positive person.

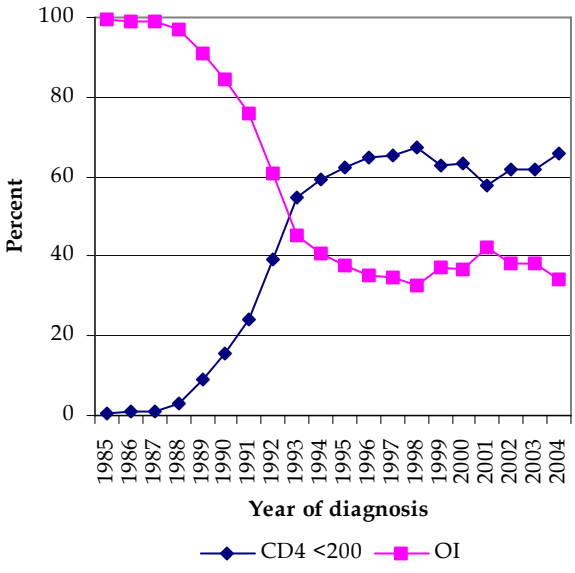
The Centers for Disease Control and Prevention (CDC) have modified the surveillance case definition for AIDS several times over the years (1985, 1987, 1993 and 1999) to encompass the full range of AIDS-indicator diseases and to incorporate HIV diagnostic tests. The 1993 expansion of the AIDS case definition for adults and adolescents (Table 1.1) includes HIV infected persons with a CD4+ count less than 200 cells/µl or a CD4+ percentage less than 14% of total T-lymphocytes, even if there are no other detectable AIDS-indicator conditions. The expanded definition also includes individuals diagnosed with pulmonary tuberculosis, recurrent pneumonia, and/or invasive cervical cancer (CDC, 1992).

The criteria for an AIDS diagnosis in children (under 13 years of age) differ from the adult/adolescent criteria in two ways. First, a CD4+ count of less than 200 cells/µl is indicative of AIDS among adults and adolescents, but not among children. Second, multiple or recurrent serious bacterial infections and lymphoid interstitial pneumonia/pulmonary lymphoid hyperplasia are accepted as indicative of AIDS among children but not among adults and adolescents.

AIDS Diagnosis

Figure 1.1 compares the proportion of AIDS cases diagnosed by an OI to those diagnosed by a low CD4+ measurement for the years 1985-2004. As shown in the graph, 100% of all AIDS cases in 1985 were diagnosed by an OI. The percentage of AIDS cases diagnosed by a low CD4+ count surpassed cases diagnosed by an OI in 1993, after the CDC issued the revised AIDS case definition. Since cases diagnosed by a low CD4+ count can often be detected earlier in the spectrum of HIV disease than cases diagnosed by an OI, the 1993 change in the AIDS definition also resulted in an increase in the number of AIDS diagnoses within 1993, when the number of new cases reached its peak (see Figure 1.3).

Figure 1.1: Proportion of AIDS Cases Diagnosed by an Opportunistic Infection versus CD4+ Count <200

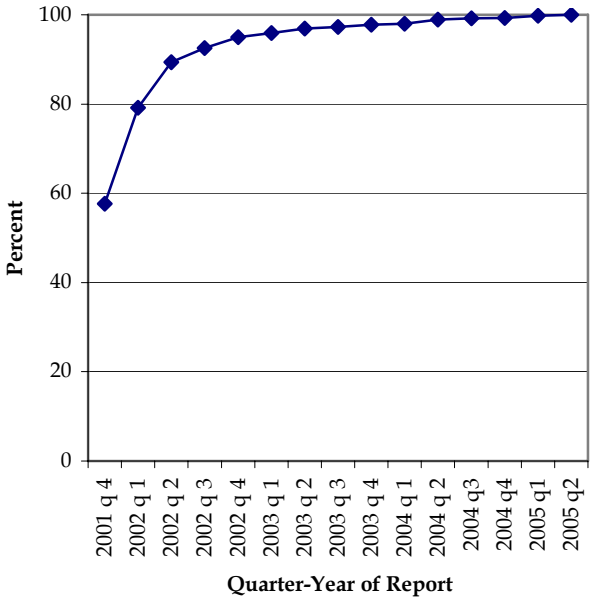


Reporting Lag

The average time from diagnosis to report for HIV cases is less than one month. The laboratory based HIV Surveillance System in Maryland requires medical laboratory directors to submit an HIV+ Laboratory Report Form for all confirmed HIV positive tests directly to the state health department or to their local health department, where the information is forwarded to the state health department. The average time from an AIDS diagnosis to entry into the AIDS registry is approximately 5-6 months. Primary AIDS case reporting is provided by health care providers and facilities and secondary case reporting is done through follow-up investigations by state and local health departments (see Chapter 2).

Figure 1.2 shows the quarter-year completeness of AIDS cases diagnosed in 2001 from the end of 2001 through June 2005. Based on these data, at the end of 2001, the 2001 data are 58% complete; by the midpoint of 2002, the 2001 data are 89% complete; and by the end of 2002, the 2001 data are 95% complete.

Figure 1.2: Quarter-Year Completeness of Reporting (AIDS Cases Diagnosed in 2001)



This annual report uses data reported through the midpoint (second quarter) of 2005. From this graph, we can estimate that at the midpoint of 2005, the 2004 data are 89% complete.

Table 1.1: 1993 Adult/Adolescent AIDS Surveillance Case Definition (CDC, 1992)

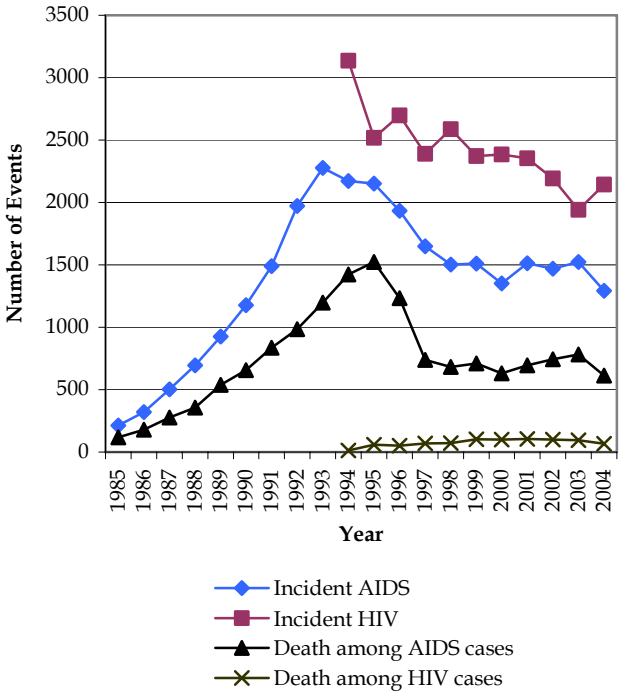
1	Candidiasis of bronchi, trachea, or lungs	14	Lymphoma, Burkitt's (or equivalent term)
2	Candidiasis, esophageal	15	Lymphoma, immunoblastic (or equivalent term)
3	Cervical cancer, invasive*	16	Lymphoma, primary, of brain
4	Coccidioidomycosis, disseminated or extrapulmonary	17	Mycobacterium avium complex or mycobacterium kansasii, disseminated or extrapulmonary
5	Cryptococcosis, extrapulmonary	18	Mycobacterium tuberculosis, any site (pulmonary* or extrapulmonary)
6	Cryptosporidiosis, chronic intestinal (>1 month duration)	19	Mycobacterium, other species or unidentified species, disseminated or extrapulmonary
7	Cytomegalovirus disease (other than liver, spleen, or nodes)	20	Pneumocystis carinii pneumonia
8	Cytomegalovirus retinitis (with loss of vision)	21	Pneumonia, recurrent in 12 month period*
9	Encephalopathy, HIV-related	22	Progressive multifocal leukoencephalopathy
10	Herpes simplex: chronic ulcer(s) (>1 month duration); or bronchitis, pneumonitis, or esophagitis	23	Salmonella septicemia, recurrent
11	Histoplasmosis, disseminated or extrapulmonary	24	Toxoplasmosis of brain
12	Isosporiasis, chronic intestinal (>1 month duration)	25	Wasting syndrome due to HIV
13	Kaposi's sarcoma	26	CD4+ T-lymphocyte counts of less than 200 cells/µL or percentage of less than 14*

*Added in the 1993 expansion of the AIDS surveillance case definition.

Overall Trends

Figure 1.3 illustrates the number of incident HIV and AIDS cases by year of diagnosis and the number of deaths among HIV and AIDS cases by year of death. Since the AIDS epidemic was recognized in 1981, a total of 27,781 individuals have been diagnosed with AIDS in Maryland. The number of AIDS cases diagnosed increased each year from 1981 until its peak in 1993, when the expansion of the AIDS case definition resulted in a one-time addition of cases. The number of new cases per year has decreased since 1993, due in large part to the introduction of successful new therapies in 1996.

Figure 1.3: Incident HIV and AIDS Cases, and Deaths among HIV and AIDS Cases by Year of Event (1985-2004)



The number of deaths among AIDS cases grew steadily until 1995, though at a slower rate than the AIDS cases. From 1995 to 1997, deaths among AIDS cases declined at a faster rate than the decline in new AIDS cases per year, also due to the introduction of new therapies. Since 1997, the number of deaths among AIDS cases and the number of new AIDS diagnoses has not changed markedly. The number of new HIV diagnoses has also decreased since HIV surveillance began in 1994. There are an estimated 2,200 new HIV cases diagnosed per year. Deaths among HIV cases who have not developed AIDS are small in number, but a total 828 deaths in this group have been recorded from 1994 through December 31, 2004.

Figure 1.4 illustrates the number of people living with HIV and AIDS (prevalence). This number has continued to increase throughout the recent period of decreasing incidence (newly diagnosed cases) and a growing proportion of prevalent HIV cases have not progressed to AIDS.

Figure 1.4: Number of Prevalent (Living) HIV and AIDS Cases on December 31 (1985-2004)

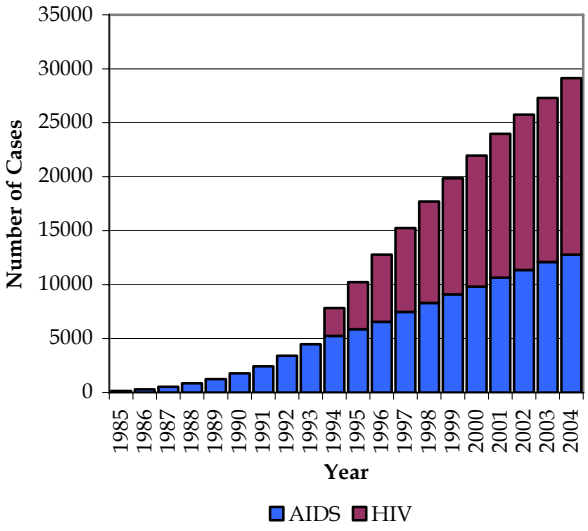


Table 1.2 presents the numbers of incident and prevalent HIV and AIDS cases; cumulative AIDS cases, and HIV and AIDS deaths by year. Incident HIV cases include individuals who progressed to AIDS in the same calendar year of their HIV diagnosis.

Table 1.2: Number of Incident and Prevalent HIV Cases; Deaths among HIV Cases; Incident, Prevalent and Cumulative AIDS Cases; and Deaths among AIDS Cases by Year of Event

YEAR	Incident HIV Cases*	Prevalent HIV Cases	Deaths Among HIV Cases	Incident AIDS Cases*	Prevalent AIDS Cases	Cumulative AIDS Cases	Deaths Among AIDS Cases
1979	-------	-------	-------	1	1	1	0
1980	-------	-------	-------	1	2	2	0
1981	-------	-------	-------	4	3	6	3
1982	-------	-------	-------	7	6	13	4
1983	-------	-------	-------	34	28	47	12
1984	-------	-------	-------	90	67	137	52
1985	-------	-------	-------	212	159	349	119
1986	-------	-------	-------	320	300	669	179
1987	-------	-------	-------	503	525	1,172	278
1988	-------	-------	-------	695	864	1,867	356
1989	-------	-------	-------	925	1,250	2,792	539
1990	-------	-------	-------	1,178	1,771	3,970	657
1991	-------	-------	-------	1,491	2,427	5,461	835
1992	-------	-------	-------	1,973	3,415	7,434	985
1993	-------	-------	-------	2,278	4,493	9,712	1,198
1994	3,135	2,597	12	2,173	5,243	11,885	1,423
1995	2,518	4,349	59	2,151	5,871	14,036	1,523
1996	2,698	6,205	52	1,933	6,569	15,969	1,234
1997	2,390	7,752	68	1,649	7,479	17,618	739
1998	2,588	9,408	71	1,503	8,300	19,121	682
1999	2,372	10,731	102	1,509	9,098	20,630	711
2000	2,385	12,118	99	1,352	9,820	21,982	630
2001	2,355	13,332	105	1,512	10,635	23,494	696
2002	2,191	14,389	100	1,470	11,360	24,964	744
2003	1,941	15,183	95	1,524	12,102	26,488	781
2004	2,143	16,342	66	1,293	12,781	27,781	614
TOTAL	**26,718**	-------	**828**	**27,781**	--------	**27,781**	**14,994**

*Data presented by year of diagnosis.

Incidence by County

Table 1.3 presents the 2000 Maryland population, 2004 incident HIV and AIDS cases, and 2004 HIV and AIDS incidence rates by county.

There were 2,143 newly diagnosed HIV cases and 1,293 newly diagnosed AIDS cases in 2004. About half of all new HIV (51%) and AIDS (46%) cases in Maryland were residents of Baltimore City at the time of diagnosis. The Washington, D.C. suburban counties in Maryland (Prince George's and Montgomery Counties) accounted for 27% of HIV and 28% of AIDS cases; and the Baltimore City suburban counties (Baltimore and Anne Arundel Counties) accounted for 10% of HIV and 12% of AIDS cases. Four percent of newly diagnosed HIV cases and 6% of newly diagnosed AIDS cases were diagnosed within the Maryland Division of Correction.

Table 1.3: Distribution of the 2000 Maryland Population, 2004 Incident HIV and AIDS Cases, and 2004 HIV and AIDS Incidence Rates by County

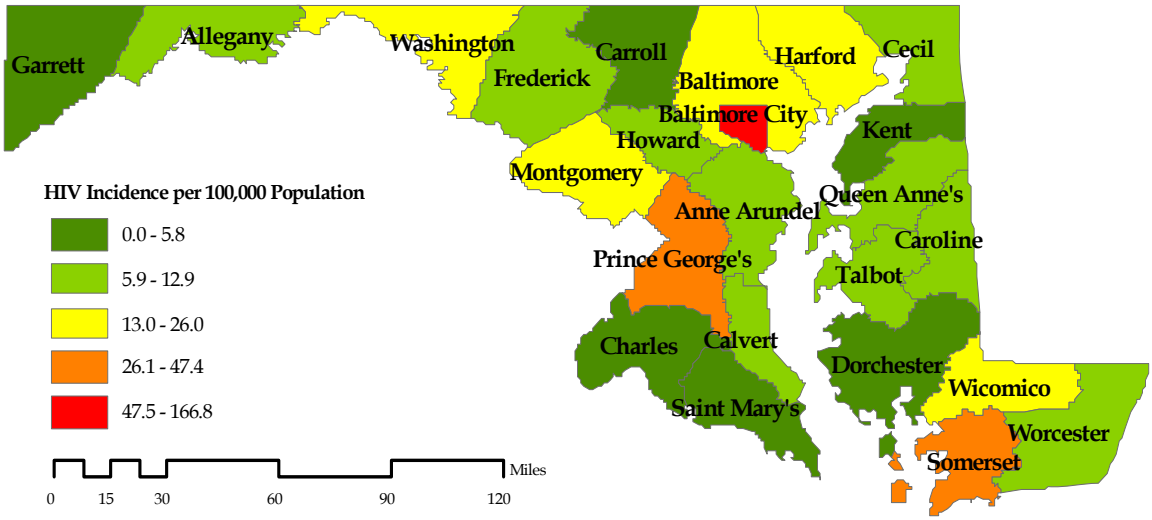
COUNTY	2000 Maryland Population*	2004 Incident HIV Cases		2004 Incident AIDS Cases		2004 HIV Incidence Rate**	2004 AIDS Incidence Rate**
		No.	%	No.	%		
Allegany	74,930	5	0.2%	3	0.2%	6.7	4.0
Anne Arundel	489,656	63	2.9%	50	3.9%	12.9	10.2
Baltimore City	651,154	1,086	50.7%	598	46.2%	166.8	91.8
Baltimore County	754,292	145	6.8%	98	7.6%	19.2	13.0
Calvert	74,563	6	0.3%	2	0.2%	8.0	2.7
Caroline	29,772	3	0.1%	0	0.0%	6.7	0.0
Carroll	150,897	5	0.3%	8	0.6%	3.3	5.3
Cecil	85,951	7	0.3%	10	0.8%	8.1	11.6
Charles	120,546	7	0.3%	8	0.6%	5.8	6.6
Dorchester	30,674	2	0.1%	6	0.5%	3.3	19.6
Frederick	195,277	19	0.9%	9	0.7%	9.7	4.6
Garrett	29,846	0	0.0%	0	0.0%	0.0	0.0
Harford	218,590	34	1.6%	18	1.4%	15.6	8.2
Howard	247,842	20	0.9%	16	1.2%	8.1	6.5
Kent	19,197	1	0.1%	1	0.1%	5.2	5.2
Montgomery	873,341	203	9.5%	131	10.1%	23.2	15.0
Prince George's	801,515	380	17.7%	232	17.9%	47.4	28.9
Queen Anne's	40,563	3	0.1%	1	0.1%	7.4	2.5
Saint Mary's	86,211	3	0.1%	0	0.0%	3.5	0.0
Somerset	24,747	11	0.5%	4	0.3%	44.4	16.2
Talbot	33,812	4	0.2%	6	0.5%	11.8	17.7
Washington	131,923	28	1.3%	4	0.3%	21.2	3.0
Wicomico	84,644	22	1.0%	4	0.3%	26.0	4.7
Worcester	46,543	4	0.2%	1	0.1%	8.6	2.1
Corrections	-------	84	3.9%	83	6.4%	-------	-------
TOTAL	**5,296,486**	**2,143**	**100.0%**	**1,293**	**100.0%**	**40.5**	**24.4**

*Census 2000.
**Per 100,000 population.

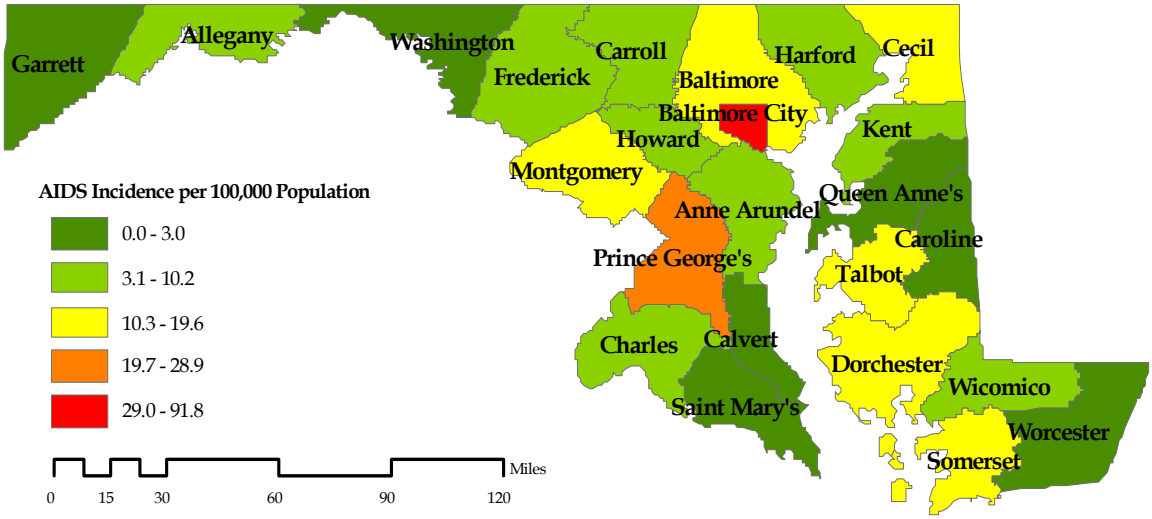
Maps 1.1 and 1.2 illustrate HIV and AIDS incidence rates across Maryland. Baltimore City, due to its concentrated number of HIV and AIDS cases, has the highest rates, followed by the Washington, D.C. suburban counties and Baltimore County.

The Southeastern counties also have elevated HIV and AIDS incidence rates due to the relatively high number of cases within the smaller populations that reside in these counties.

Map 1.1: HIV Incidence Rates in Maryland in 2004 by County of Residence at Diagnosis



Map 1.2: AIDS Incidence Rates in Maryland in 2004 by County of Residence at Diagnosis



Prevalence by County

Table 1.4 presents the 2000 Maryland population, 2004 prevalent HIV and AIDS cases, and 2004 HIV and AIDS prevalence rates by county.

On December 31, 2004, there were an estimated 16,342 prevalent HIV cases and 12,781 prevalent AIDS cases. The largest percentage of cases were among residents of Baltimore City (51% of all prevalent HIV cases and 47% of all prevalent AIDS cases), residents of Prince George's and Montgomery Counties surrounding Washington, D.C. (21% of all prevalent HIV cases and 27% of all prevalent AIDS cases), and those housed in the Division of Correction (11% of all prevalent HIV cases and 7% of all prevalent AIDS cases).

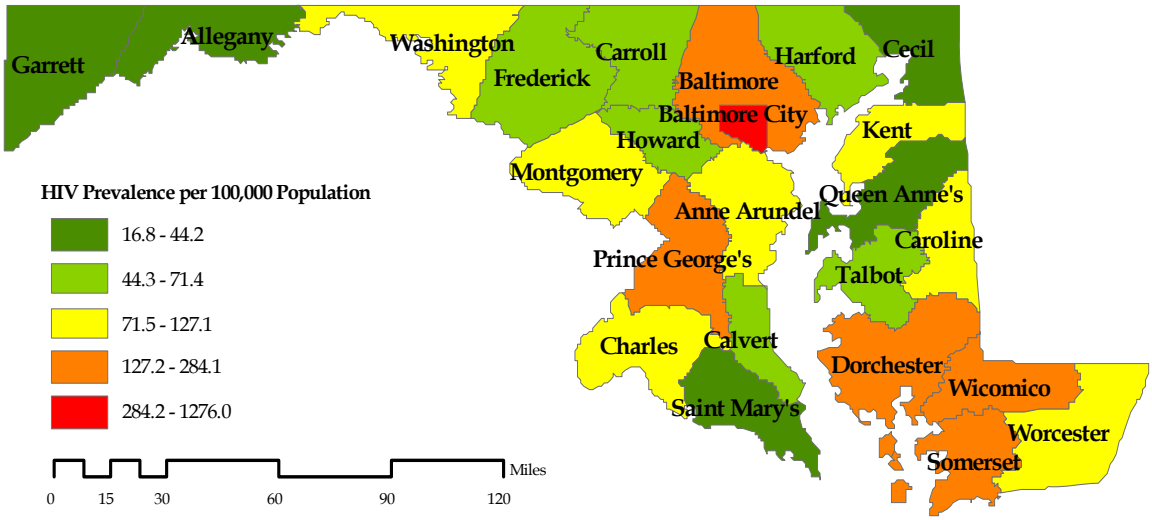
Table 1.4: Distribution of the 2000 Maryland Population, 2004 Prevalent HIV and AIDS Cases, and 2004 HIV and AIDS Prevalence Rates by County

COUNTY	2000 Maryland Population*	2004 Prevalent HIV Cases		2004 Prevalent AIDS Cases		2004 HIV Prevalence Rate**	2004 AIDS Prevalence Rate**
		No.	%	No.	%		
Allegany	74,930	27	0.2%	26	0.2%	36.0	34.7
Anne Arundel	489,656	423	2.6%	428	3.3%	86.4	87.4
Baltimore City	651,154	8,309	50.8%	6,037	47.2%	1276.0	927.1
Baltimore County	754,292	1,139	7.0%	900	7.0%	151.0	119.3
Calvert	74,563	40	0.2%	38	0.3%	53.6	51.0
Caroline	29,772	29	0.2%	20	0.2%	97.4	67.2
Carroll	150,897	85	0.5%	47	0.4%	56.3	31.1
Cecil	85,951	38	0.2%	57	0.4%	44.2	66.3
Charles	120,546	110	0.7%	87	0.7%	91.3	72.2
Dorchester	30,674	49	0.3%	56	0.4%	159.7	182.6
Frederick	195,277	118	0.7%	105	0.8%	60.4	53.8
Garrett	29,846	5	0.0%	3	0.0%	16.8	10.1
Harford	218,590	156	1.0%	160	1.3%	71.4	73.2
Howard	247,842	143	0.9%	138	1.1%	57.7	55.7
Kent	19,197	16	0.1%	16	0.1%	83.3	83.3
Montgomery	873,341	1,110	6.8%	1,196	9.4%	127.1	136.9
Prince George's	801,515	2,277	13.9%	2,251	17.6%	284.1	280.8
Queen Anne's	40,563	15	0.1%	21	0.2%	37.0	51.8
Saint Mary's	86,211	31	0.2%	36	0.3%	36.0	41.8
Somerset	24,747	41	0.3%	22	0.2%	165.7	88.9
Talbot	33,812	23	0.1%	32	0.3%	68.0	94.6
Washington	131,923	158	1.0%	88	0.7%	119.8	66.7
Wicomico	84,644	166	1.0%	83	0.6%	196.1	98.1
Worcester	46,543	47	0.3%	35	0.3%	101.0	75.2
Corrections	-------	1,787	10.9%	899	7.0%	-------	-------
TOTAL	**5,296,486**	**16,342**	**100.0%**	**12,781**	**100.0%**	**308.5**	**241.3**

*Census 2000.
**Per 100,000 population.

Maps 1.3 and 1.4 illustrate HIV and AIDS prevalence rates in Maryland by county on December 31, 2004. Baltimore City had the highest HIV and AIDS prevalence rates. Baltimore County and the suburban Washington, D.C. counties (Prince George's and Montgomery Counties) also had relatively high HIV and AIDS prevalence rates at the end of 2004. In addition, several of the Eastern counties had noticeably high prevalence rates, since the numbers of cases are high relative to their populations.

Map 1.3: HIV Prevalence Rates in Maryland on December 31, 2004 by County of Residence at Diagnosis



Map 1.4: AIDS Prevalence Rates in Maryland on December 31, 2004 by County of Residence at Diagnosis

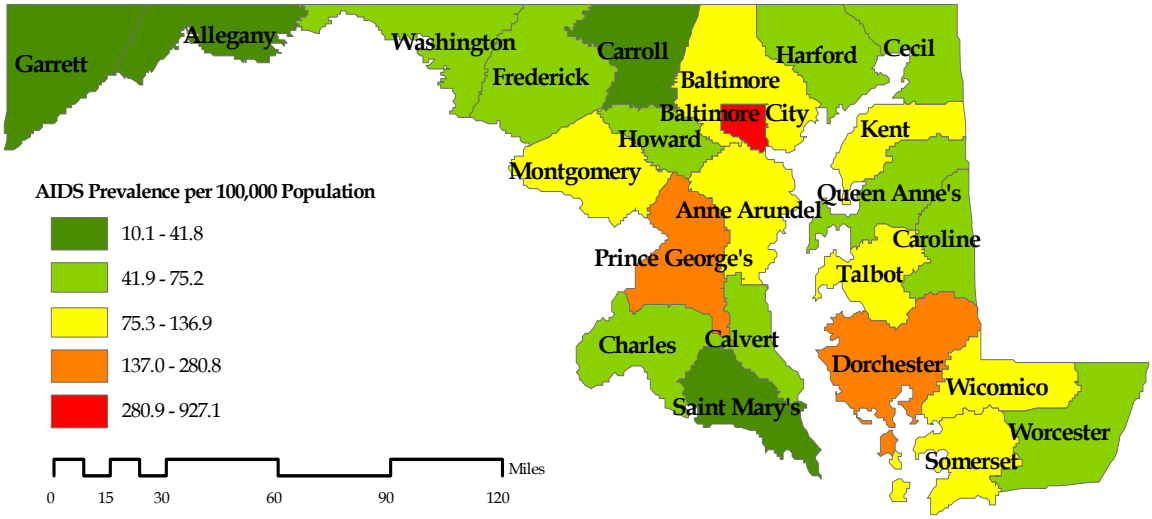


Table 1.5 presents the 2000 Maryland population, combined data on the 2004 prevalent HIV/AIDS cases, and the 2004 HIV/AIDS prevalence rates by county on December 31, 2004.

There were an estimated 29,123 prevalent HIV/AIDS cases on December 31, 2004. Almost half of all prevalent HIV/AIDS cases (49%) were residents of Baltimore City at the time of diagnosis. The suburban Washington, D.C. counties (Prince George's and Montgomery Counties) accounted for 23% of prevalent HIV/AIDS cases, and the Division of Correction accounted for 9% of prevalent HIV/AIDS cases.

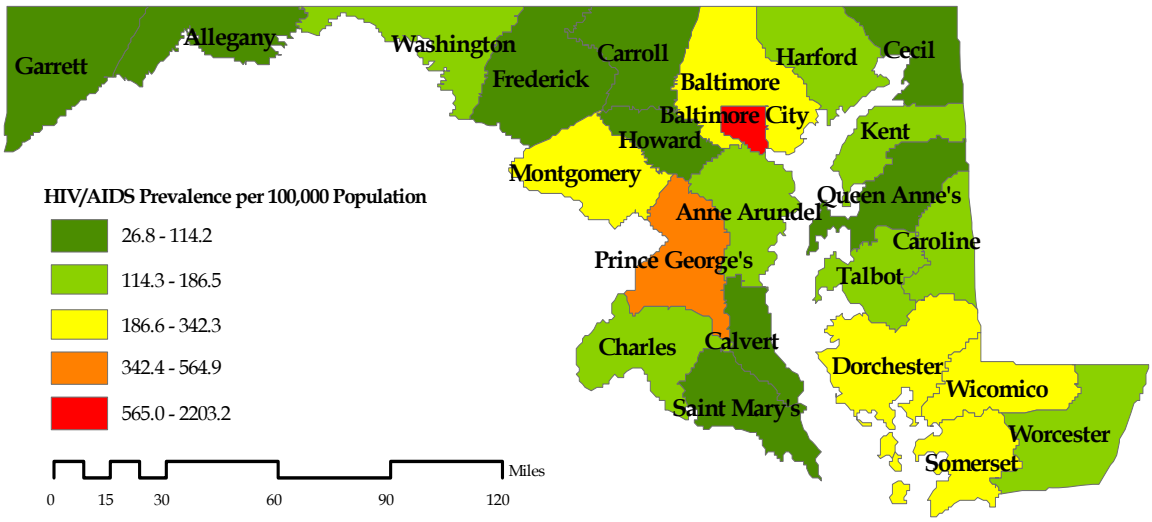
Table 1.5: Distribution of the 2000 Maryland Population, 2004 Prevalent HIV/AIDS Cases, and 2004 HIV/AIDS Prevalence Rates by County

COUNTY	2000 Maryland Population*	2004 Prevalent HIV/AIDS Cases		2004 HIV/AIDS Prevalence Rate**
		No.	%	
Allegany	74,930	53	0.2%	70.7
Anne Arundel	489,656	851	2.9%	173.8
Baltimore City	651,154	14,346	49.3%	2,203.2
Baltimore County	754,292	2,039	7.0%	270.3
Calvert	74,563	78	0.3%	104.6
Caroline	29,772	49	0.2%	164.6
Carroll	150,897	132	0.5%	87.5
Cecil	85,951	95	0.3%	110.5
Charles	120,546	197	0.7%	163.4
Dorchester	30,674	105	0.4%	342.3
Frederick	195,277	223	0.8%	114.2
Garrett	29,846	8	0.0%	26.8
Harford	218,590	316	1.1%	144.6
Howard	247,842	281	1.0%	113.4
Kent	19,197	32	0.1%	166.7
Montgomery	873,341	2,306	7.9%	264.0
Prince George's	801,515	4,528	15.5%	564.9
Queen Anne's	40,563	36	0.1%	88.8
Saint Mary's	86,211	67	0.2%	77.7
Somerset	24,747	63	0.2%	254.6
Talbot	33,812	55	0.2%	162.7
Washington	131,923	246	0.8%	186.5
Wicomico	84,644	249	0.8%	294.2
Worcester	46,543	82	0.3%	176.2
Corrections	-------	2,686	9.2%	-------
TOTAL	**5,296,486**	**29,123**	**100.0%**	**549.9**

*Census 2000.
**Per 100,000 population.

Map 1.5 illustrates the HIV/AIDS prevalence rates in Maryland by county on December 31, 2004. Baltimore City has substantially higher HIV/AIDS prevalence rates than the rest of the counties in Maryland, followed by the suburban Washington, D.C. counties (Prince George's and Montgomery Counties), Baltimore County, and several of the Eastern Shore counties (Dorchester, Somerset and Wicomico Counties).

Map 1.5: HIV/AIDS Prevalence Rates in Maryland on December 31, 2004 by County of Residence at Diagnosis



CHAPTER 2: DATA SOURCES

Surveillance data are collected to describe the demographic and geographic determinants of the HIV/AIDS epidemic in terms of incidence, prevalence, and mortality. Active surveillance not only identifies the magnitude of the medical, economic, and social impacts of the HIV/AIDS epidemic, but it also helps in the process of describing the community's needs, and then developing, targeting, and evaluating both prevention and treatment programs based on those needs. Surveillance and epidemiologic data also serve to guide decisions about policy development and planning for services and resource allocation.

AIDS Case Reporting System

The Maryland Department of Health and Mental Hygiene (DHMH), AIDS Administration maintains the HIV/AIDS Reporting System (HARS), a confidential, name-based registry of all AIDS cases who have ever lived in or received care within Maryland. Primary case reporting is conducted by health care providers and facilities. Secondary case reporting is performed by the state and local health departments through reviews of death records, hospital discharge summaries, tuberculosis registries, cancer registries, Medicaid claims files, AIDS drug assistance program records, and laboratory reporting of low CD4+ cell counts.

All AIDS cases are reported to the AIDS Administration using a uniform surveillance case definition and case report form provided by the CDC. There are two types of AIDS case definitions and AIDS case report forms: one for adult and adolescent cases (13 years of age or older at time of diagnosis) and another for pediatric cases (less than 13 years of age at time of diagnosis). The following information is collected on the case report forms:

a) Patient name, address, and social security number;

b) Patient demographics (i.e. gender, race/ethnicity, birth date, death date when applicable);

c) Facility of diagnosis (i.e. name, location, type);

d) Patient history (i.e. mode of exposure);

e) Maternal history (pediatric cases only);

f) Laboratory data (i.e. testing methods and results);

g) Clinical status (i.e. AIDS indicator diseases);

h) Birth history (pediatric cases only); and

i) Treatment and services referrals.

The AIDS case report forms are reviewed for completeness, and if necessary the provider is contacted for any additional information. Determination of Maryland residence at the time of initial AIDS diagnosis is done in conjunction with other states and the CDC. State and national death databases are routinely searched to confirm the vital status of all previously reported cases.

The HARS database includes all AIDS cases that have been reported to the Maryland state health department. In addition, HARS includes (up until December 2001) HIV (non-AIDS) infected cases with symptomatic conditions. This report describes HIV and AIDS patients who were residents of Maryland at the time of diagnosis.

HIV Case Reporting System

Though AIDS data remain useful for health care and service planning, they do not provide sufficient information for guiding future HIV prevention efforts. Before 1996, the median time from HIV infection to AIDS was about ten years. Since 1996, the median time from HIV infection to AIDS has increased due to the availability of antiretroviral therapy and improved prophylaxis against opportunistic infections. As improvements in treatment have occurred and the time from HIV infection to AIDS diagnosis has increased, the surveillance of HIV cases has become increasingly important. To understand the full spectrum of HIV disease, it is important to continue obtaining accurate surveillance information about the incidence and prevalence of HIV infections as well as AIDS cases.

In addition to HARS, the Maryland DHMH AIDS Administration maintains a registry of all HIV positive non-AIDS cases, by Unique Identifier (UI), who have lived in Maryland and have received a positive HIV test in Maryland since June 1, 1994. The code-based reporting system provides an anonymous registry of HIV infected individuals in Maryland. The UI is a 14 digit number consisting of the last four digits of the individual's Social Security number, eight digits of the individual's date of birth, one digit representing the individual's race/ethnicity, and one digit representing the individual's gender.

The UI elements were selected to ensure anonymity while enabling the health department to describe the pattern of disease. The UI number, when complete, is 99.987% unique (Solomon, 1999). Therefore, it is unlikely that a single, complete UI number would refer to more than one individual.

Maryland's HIV surveillance system is laboratory-based. The provider who orders an HIV, CD4+, or HIV viral load test is responsible for generating the UI number and sending it to the laboratory with the requisition. Medical laboratory directors both in and out of state are required to submit a Laboratory Reporting Form to the state health department to report all confirmed HIV positive infections, CD4+ lymphocyte counts less than 200 cells/μl, and any HIV viral load test results for Maryland residents by UI. Alternatively, labs can send Laboratory Reporting Forms to the local health departments, where the forms are then forwarded to the state health department. The Laboratory Reporting Form contains the following information:

a) Unique Identifier (UI);

b) ZIP code of patient's residence;

c) Type of laboratory test and result;

d) Name and address of the laboratory or assigned laboratory number;

e) Health care provider's name, address, and telephone number;

f) Date the test specimen was obtained from the patient; and

g) Name and phone number of the person completing the form.

All low CD4+ test results reported are routinely matched by UI to the AIDS case registry. Low CD4+ tests that do not match existing cases in the registry are investigated as potential new AIDS cases. All HIV viral load tests reported are routinely matched by UI to the HIV and AIDS case registries. HIV viral load tests that do not match existing cases in the registries are investigated as potential new HIV or AIDS cases.

HIV positive test results with complete UIs or UIs missing only race and/or gender are matched to both the HIV registry and the

AIDS registry to produce unduplicated HIV incidence estimates that are then adjusted to account for tests with incomplete UI numbers. HIV positive tests that do not match existing cases in the registries are investigated to confirm HIV status and to collect information on mode of HIV exposure. Systematic collection of information on mode of HIV exposure began in 1998 and is available yet incomplete (34.6% of all new HIV cases detected in 2004 had an identified mode of exposure by June 2005).

There are three known reasons for why the data for HIV cases are not complete and may not accurately represent the demographics of the entire population of HIV cases. First, Maryland borders on four other states and the District of Columbia, and border crossing for health care and HIV testing is not captured. Second, individuals who tested positive prior to June 1994 and have not been tested since then are not included in the Maryland HIV registry until they are either re-tested or develop AIDS. Third, the CDC estimates that 25% of all HIV infected people in the U.S. are unaware that they are infected (CDC, 2003).

HIV Reporting System Evaluation

The HIV reporting system was evaluated using four criteria: the uniqueness of the UI, the completeness of the UI, the completeness of reporting, and the accuracy of matching the UI from one database to another. Details of this evaluation were reported in the *Journal of AIDS* (Solomon, 1999) and are summarized here. The UI was applied to the name-based AIDS registry and duplicate UIs were investigated. Eight pairs of records with duplicate UIs were found to be the same person with two different names in the AIDS registry. Only two pairs of records were found to be different individuals sharing the same UI. Based on this, the uniqueness of the UI for AIDS cases was found to be 99.987%. Overall completeness of the UI reported by laboratories started at 55% in 1994 and increased to 63% in 1998. Completeness of the individual components of the UI varies. In 1998, gender was reported 99% of the time, date of birth was reported 98% of the time, race/ethnicity was reported 80% of the time, and the last four digits of the Social Security number were reported 77% of the time.

Completeness of reporting was evaluated in two studies. The first examined all CD4+ less than 200 cells/μl tests reported to the AIDS registry through routine surveillance medical record reviews in a one-year period (1996) and verified that they were reported through laboratory reporting. Eighty-five percent of the tests in the AIDS registry were matched to laboratory reports by UI. The second evaluation examined all HIV positive individuals identified through confidential Counseling, Testing and Referral (CTR) sites in a one-year period (1997) and verified that they were reported through laboratory reporting. Eighty-eight percent of the positive tests in CTR were matched to laboratory reports by UI.

The accuracy of matching was assessed by investigating all CTR tests from one county that shared the same UI with another CTR test in the same or any other county in Maryland (201 tests). Testing consent forms were reviewed (95% located) to confirm the identity of the person testing. In all cases of multiple tests, both within the county and across different counties, the names either matched perfectly or varied with an explanation provided by clinic staff (i.e. surname change due to marriage).

More recently, the CDC provided data that permitted an overall outcome evaluation. Since not all states were performing name-based HIV case reporting, the CDC used data from the 25 states that were performing

both HIV and AIDS name-based reporting to generate estimates of HIV cases using a state's AIDS cases. The estimate released in 1999 for Maryland was 10,714 non-AIDS HIV adolescent and adult cases. At that time, the Maryland HIV surveillance system was reporting 10,749 HIV cases, an agreement of 99.7%.

CHAPTER 3: 2004 INCIDENCE

There were 2,143 HIV (non-AIDS) cases and 1,293 AIDS cases diagnosed in Maryland in 2004, as reported through June 30, 2005. Incident HIV (non-AIDS) case measures include individuals who progressed to AIDS within the same calendar year of their HIV diagnosis.

Incidence measures are important in determining target populations for prevention programs. The numbers of newly diagnosed HIV and AIDS cases in a given year are used as measures of incident cases. Because there is a lag time between the diagnosis of an HIV or AIDS case and its entry into the HIV and AIDS registries, incidence data from 2004 reported through June 2005 may be understated. Recent annual data are useful for determining which populations are currently affected by HIV/AIDS and to what magnitude.

United States Census data from 2000 were used to obtain demographic and geographic distributions of the Maryland population. According to the 2000 Census, Maryland's population has grown 10.8% since 1990, from 4,781,468 to 5,296,486. However, the population of Baltimore City has undergone an 11.5% decline from 736,014 to 651,154. Most of the county populations have increased, with the exception of Allegany County, which has decreased slightly. African-Americans represent a greater proportion of all Maryland residents in the 2000 Census (27.6%) compared to the 1990 Census (24.9%). Whites represent a smaller proportion of all Maryland residents in the 2000 Census (62.1%) compared to the 1990 Census (71.0%).

Comparisons between the Maryland general population and incident HIV and AIDS cases are made to identify populations in which the HIV/AIDS epidemic has had the greatest impact. Comparisons by gender, race/ethnicity, age group and exposure category are shown in Table 3.1. Gender, race/ethnicity and age category comparisons are illustrated in Figures 3.1 to 3.3. Information on HIV/AIDS cases by exposure category is presented in Figure 3.4. Comparisons by counties and the Division of Correction are shown in Table 3.2 and are illustrated in Figure 3.5.

Table 3.1: Distribution of the 2000 Maryland Population, 2004 Incident HIV and AIDS Cases, and 2004 HIV and AIDS Incidence Rates by Gender, Race/Ethnicity, Age and Mode of Exposure

	2000 Maryland Population *****	2004 Incident HIV Cases		2004 Incident AIDS Cases		2004 HIV Incidence Rate ******	2004 AIDS Incidence Rate ******
MARYLAND	5,296,486	2,143	100.0%	1,293	100.0%	40.5	24.4
GENDER							
Male	2,557,794	1,330	62.2%	827	64.0%	52.0	32.3
Female	2,738,692	808	37.8%	466	36.0%	29.5	17.0
Missing*	-----	5	-----	0	-----	-----	-----
RACE/ETHNICITY							
White	3,286,547	247	15.2%	170	13.1%	7.5	5.2
African-American	1,464,735	1,284	79.2%	1,077	83.3%	87.7	73.5
Hispanic	227,916	30	1.9%	35	2.7%	13.2	15.4
Other	317,288	60	3.7%	11	0.9%	18.9	3.5
Missing*	-----	522	-----	0	-----	-----	-----
AGE (years)*							
<5	353,393	5	0.2%	1	0.0%	1.4	0.3
5-12	631,965	1	0.1%	2	0.2%	0.2	0.3
13-19	507,607	60	2.8%	14	1.1%	11.8	2.8
20-29	656,999	421	19.6%	135	10.4%	64.1	20.5
30-39	870,439	666	31.1%	400	30.9%	76.5	45.9
40-49	850,758	673	31.4%	495	38.3%	79.1	58.2
50-59	624,289	255	11.9%	196	15.2%	40.8	31.4
60+	801,036	62	2.9%	50	3.9%	7.7	6.2
EXPOSURE***							
MSM	-----	129	19.3%	209	19.2%	-----	-----
IDU	-----	197	29.3%	446	41.0%	-----	-----
MSM/IDU	-----	9	1.4%	20	1.8%	-----	-----
Hemophiliac/Transf.	-----	3	0.4%	5	0.5%	-----	-----
Heterosexual PR	-----	263	39.2%	402	36.9%	-----	-----
****Heterosexual PI	-----	63	9.4%	-----	-----	-----	-----
Pediatric	-----	7	1.0%	7	0.6%	-----	-----
Other	-----	0	0.0%	0	0.0%	-----	-----
Risk not Specified	-----	72	-----	204	-----	-----	-----
Missing	-----	1,400	-----	0	-----	-----	-----

* Missing data are not included in distribution percentages.

** Age at diagnosis.

*** Risk not specified and missing data are not included in distribution percentages.

MSM = Men who have sex with men.

IDU = Injection drug users.

MSM/IDU = Men who have sex with men and are injection drug users.

HetSexPR = Heterosexual contact with a partner who has or is at risk for HIV.

HetSexPI = Heterosexual contact with a partner of indeterminate risk for HIV.

**** Not a CDC defined category.

***** Census 2000.

****** Per 100,000 population.

Table 3.2: Distribution of the 2000 Maryland Population, 2004 Incident HIV and AIDS Cases, and 2004 HIV and AIDS Incidence Rates by County

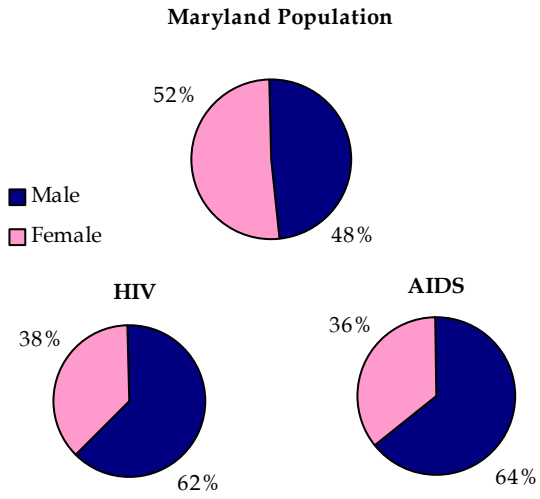
COUNTY	2000 Maryland Population*	2004 Incident HIV Cases		2004 Incident AIDS Cases		2004 HIV Incidence Rate**	2004 AIDS Incidence Rate**
		No.	%	No.	%		
Allegany	74,930	5	0.2%	3	0.2%	6.7	4.0
Anne Arundel	489,656	63	2.9%	50	3.9%	12.9	10.2
Baltimore City	651,154	1,086	50.7%	598	46.2%	166.8	91.8
Baltimore County	754,292	145	6.8%	98	7.6%	19.2	13.0
Calvert	74,563	6	0.3%	2	0.2%	8.0	2.7
Caroline	29,772	2	0.1%	0	0.0%	6.7	0.0
Carroll	150,897	5	0.3%	8	0.6%	3.3	5.3
Cecil	85,951	7	0.3%	10	0.8%	8.1	11.6
Charles	120,546	7	0.3%	8	0.6%	5.8	6.6
Dorchester	30,674	1	0.1%	6	0.5%	3.3	19.6
Frederick	195,277	19	0.9%	9	0.7%	9.7	4.6
Garrett	29,846	0	0.0%	0	0.0%	0.0	0.0
Harford	218,590	34	1.6%	18	1.4%	15.6	8.2
Howard	247,842	20	0.9%	16	1.2%	8.1	6.5
Kent	19,197	1	0.1%	1	0.1%	5.2	5.2
Montgomery	873,341	203	9.5%	131	10.1%	23.2	15.0
Prince George's	801,515	380	17.7%	232	17.9%	47.4	28.9
Queen Anne's	40,563	3	0.1%	1	0.1%	7.4	2.5
Saint Mary's	86,211	3	0.1%	0	0.0%	3.5	0.0
Somerset	24,747	11	0.5%	4	0.3%	44.4	16.2
Talbot	33,812	4	0.2%	6	0.5%	11.8	17.7
Washington	131,923	28	1.3%	4	0.3%	21.2	3.0
Wicomico	84,644	22	1.0%	4	0.3%	26.0	4.7
Worcester	46,543	4	0.2%	1	0.1%	8.6	2.1
Corrections	-------	84	3.9%	83	6.4%	-------	-------
TOTAL	**5,296,486**	**2,143**	**100.0%**	**1,293**	**100.0%**	**40.5**	**24.4**

*Census 2000.
**Per 100,000 population.

Gender

Gender distributions for the Maryland population and incident HIV and AIDS cases are shown in Figure 3.1. According to the 2000 U.S. Census, the gender distribution of the Maryland population is 48% male and 52% female. Figure 3.1 demonstrates that males, representing a higher percentage of incident HIV cases than the general population (62% vs. 48%), and a higher percentage of incident AIDS cases than the general population (64% vs. 48%) are disproportionately affected by HIV and AIDS in Maryland.

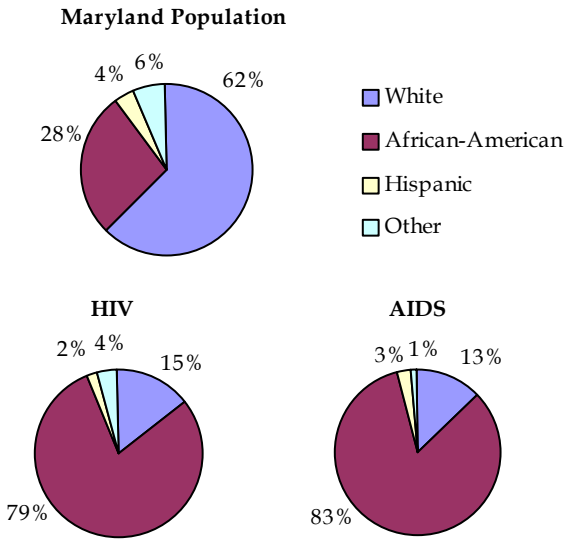
Figure 3.1: Proportion of the 2000 Maryland Population, 2004 HIV Cases and 2004 AIDS Cases by Gender



Race/Ethnicity

Race/ethnicity distributions for the Maryland population and incident HIV and AIDS cases are shown in Figure 3.2. Figure 3.2 demonstrates that both HIV and AIDS in Maryland disproportionately affect African-Americans, representing 28% of the Maryland population and 79% of incident HIV cases and 83% of incident AIDS cases. Whites represent 62% of the Maryland population, yet account for only 15% of incident HIV cases, and 13% of incident AIDS cases. Hispanics represent 4% of the Maryland population, 2% of incident HIV cases, and 3% of incident AIDS cases. Nationally, Hispanics make up a large percentage of HIV and AIDS cases, however, the number of Hispanic cases is small in Maryland because there are not many individuals of Hispanic origin residing in Maryland. Individuals in the Other race/ethnicity category, (Asian, Pacific Islander, American Indian, Other race, or two or more races) represent 6% of the Maryland population, 4% of incident HIV cases, and 1% of incident AIDS cases. Race/ethnicity was not reported for approximately 24% of incident HIV cases.

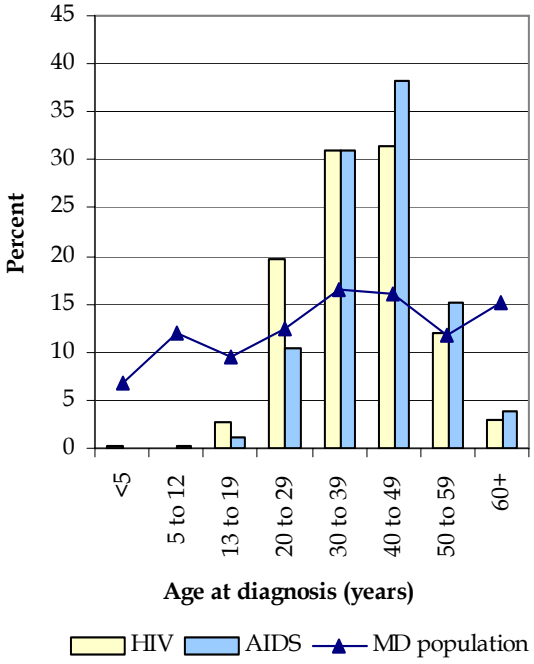
Figure 3.2: Proportion of the 2000 Maryland Population, 2004 HIV Cases and 2004 AIDS Cases by Race/Ethnicity



Age Group

The percentages of incident HIV and AIDS cases according to age group at the time of diagnosis are shown in Figure 3.3. The blue line in Figure 3.3 represents the percentages of the total Maryland population within each age category. Bars that are taller than the line illustrating the general population represent those age groups that are disproportionately affected by HIV and/or AIDS. There is a greater proportion of HIV cases (19%) than AIDS cases (10%) in the 20-29 year age group and a smaller proportion of HIV cases (31%) than AIDS cases (38%) in the 40-49 year age groups. HIV disproportionately affects 20-49 year olds (82% vs. 45% in the general population), and AIDS disproportionately affects 30-49 year olds (69% vs. 32% in the general population). The mean age of HIV and AIDS diagnoses in 2004 was 38 and 41 years, respectively.

Figure 3.3: Proportion of the 2000 Maryland Population, 2004 HIV Cases and 2004 AIDS Cases by Age Group



Exposure Category

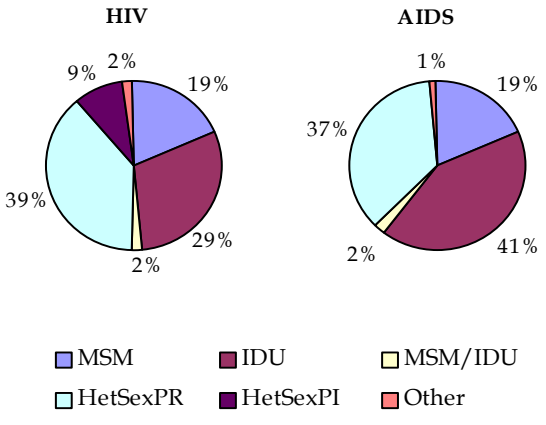
Percent distributions of mode of exposure are based on individuals with risk information available. Individuals with no current information on exposure are labeled risk not specified (RNS) or missing. Exposure information for 2004 incident cases is presented for 31% of the HIV cases and 84% of the AIDS cases.

For surveillance purposes, HIV and AIDS cases are counted only once in the following hierarchy of HIV risk: men who have sex with men (MSM); injection drug use (IDU); hemophilia/coagulation disorder; heterosexual contact (with a partner who has or is at risk of HIV); receipt of blood transfusion, blood components, or tissue; other risk, which includes occupational exposures; and risk not specified (RNS). Persons with more than one reported mode of exposure to HIV are classified in the exposure category listed first in the hierarchy. The exception to this rule is for men who have a history of both sexual contacts with other men and injection drug use; they represent a separate dual-exposure category (MSM/IDU).

The proportion of HIV and AIDS cases attributed to heterosexual contact has been increasing in Maryland (see Figures 5.11 and 5.12). The CDC defines heterosexual risk as heterosexual contact with someone in a primary risk group (MSM, IDU, hemophiliac) or with someone known to be HIV infected. Therefore, those with AIDS who acquired HIV from heterosexual contact with a person of unknown risk are not categorized by the CDC as heterosexual risk but rather as risk not specified (RNS). Incorporated as a part of Maryland's HIV surveillance system, those who acquired HIV through heterosexual contact are classified into one of two groups: heterosexual contact with a partner at risk (Heterosexual PR) and heterosexual contact with a partner of indeterminate risk (Heterosexual PI), which is classified by the CDC as RNS. Both categories, Heterosexual PR and Heterosexual PI, are employed in this report to show modes of exposure to HIV; Heterosexual PR alone is used to describe modes of exposure for AIDS cases.

Exposure distributions for incident HIV and AIDS cases with risk information available are shown in Figure 3.4. Heterosexual contact was the most common mode of exposure among incident HIV cases: 39% through heterosexual sex with a partner at risk (HetSexPR) and 9% through heterosexual sex with a partner of indeterminate risk (HetSexPI). Injection drug use (IDU) was the mode of exposure in 29% of incident HIV cases, MSM in 19% of incident HIV cases, and MSM/IDU in approximately 2% of incident HIV cases. Other exposure groups accounted for approximately 2% of all incident HIV cases. Of the incident AIDS cases, injection drug use (IDU) was the most commonly reported mode of exposure (41%), followed by heterosexual sex with a partner at risk (HetSexPR) (37%); MSM (19%); and MSM/IDU (2%). Other exposures, including hemophilia, transfusions, and pediatric exposures comprised around 1% of all 2004 incident AIDS cases.

Figure 3.4: Proportion of 2004 HIV Cases and 2004 AIDS Cases by Exposure Category

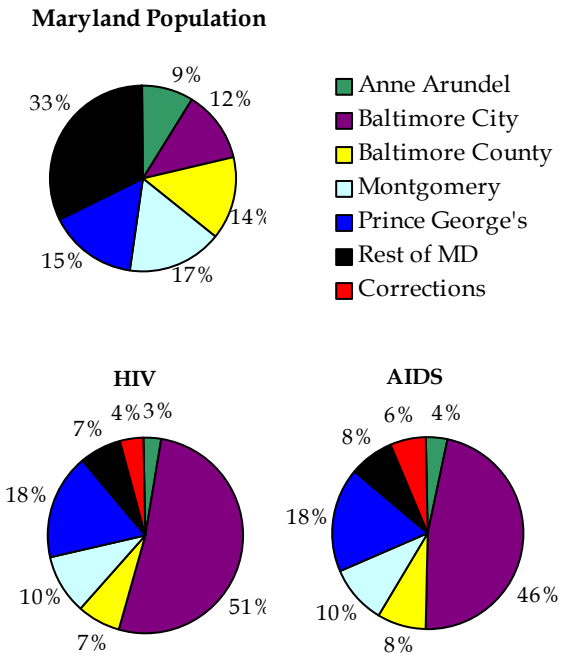


Geographic Location

Geographical distributions for the 2000 Maryland population and incident HIV and AIDS cases are shown in Figure 3.5. Although Baltimore City represents only 12% of the Maryland population, 51% of incident HIV cases and 46% of incident AIDS cases reside in Baltimore City. The bordering counties, Anne Arundel and Baltimore counties, together represent 23% of the Maryland population, 11% of incident HIV cases and 12% of incident AIDS cases. Residents of suburban Washington, D.C. (Montgomery and Prince George's counties) represent 32% of the Maryland population, 28% of incident HIV cases and 28% of incident AIDS cases. HIV may be under-reported in the suburban Washington, D.C. region if residents of these Maryland counties are tested for HIV solely in Washington, D.C. Tests done in Washington, D.C. are not reported in Maryland.

Individuals newly diagnosed in the Division of Correction represent 4% of incident HIV cases and 6% of incident AIDS cases in Maryland. Although the Division of Correction is not separately counted in the 2000 Census, it consistently represents less than 1% of the State population (U.S. Department of Justice, 2003). The high percentage of HIV identified in the Division of Correction is likely due to the concentration of HIV risk behaviors in this population, and initiatives to make HIV testing available to all inmates (see Chapter 9 Fact sheet: HIV/AIDS Among the Incarcerated Population in Maryland).

Figure 3.5: Proportion of the 2000 Maryland Population, 2004 HIV Cases, and 2004 AIDS Cases by Geographic Location



The rest of the state makes up 33% of the population and comprises 7% of incident HIV cases and 8% of incident AIDS cases.

Incident HIV and AIDS Cases by Descriptive Variables

Tables 3.3 and 3.4 present 2004 incident HIV and AIDS cases by age group and race/ethnicity for males and females. Tables 3.5 and 3.6 present incident HIV and AIDS cases by exposure category and race/ethnicity for males and females and for pediatric AIDS cases.

Table 3.3 Incident HIV Cases in 2004 by Age, Race/Ethnicity and Gender

MALE	White	African-American	Other	Unknown	Total
<5	0	1	0	3	4
5-12	0	0	0	0	0
13-19	4	26	1	4	35
20-29	31	170	5	41	247
30-39	58	213	18	105	394
40-49	53	296	11	82	442
50-59	20	84	7	52	163
60+	4	23	0	18	45
MALE TOTAL	**170**	**813**	**42**	**305**	**1,330**

FEMALE	White	African-American	Other	Unknown	Total
<5	0	0	0	0	0
5-12	0	1	0	0	1
13-19	0	17	3	4	24
20-29	28	89	15	41	173
30-39	31	143	26	71	271
40-49	8	150	4	68	230
50-59	10	53	0	28	91
60+	0	15	0	3	18
FEMALE TOTAL	**77**	**468**	**48**	**215**	**808**
Missing Gender	**0**	**3**	**0**	**2**	**5**
TOTAL	**247**	**1,284**	**90**	**522**	**2,143**

Table 3.4: Incident AIDS Cases in 2004 by Age, Race/Ethnicity and Gender

MALE	White	African-American	Other	Total
<5	0	1	0	1
5-12	0	1	0	1
13-19	1	6	0	7
20-29	10	68	8	86
30-39	36	177	16	229
40-49	50	269	8	327
50-59	20	111	7	138
60+	9	29	0	38
MALE TOTAL	**126**	**662**	**39**	**827**

FEMALE	White	African-American	Other	Total
<5	0	0	0	0
5-12	0	1	0	1
13-19	0	6	1	7
20-29	4	44	1	49
30-39	16	152	3	171
40-49	17	150	1	168
50-59	5	52	1	58
60+	2	10	0	12
FEMALE TOTAL	**44**	**415**	**7**	**466**
TOTAL	**170**	**1,077**	**46**	**1,293**

Table 3.5 Incident HIV Cases in 2004 by Exposure Category, Race/Ethnicity and Gender

MALE	White	African-American	Other	Missing	Total
MSM	39	81	1	8	129
IDU	11	99	2	16	128
MSM/IDU	0	5	4	0	9
Heterosexual PR	12	77	7	27	123
Heterosexual PI	0	32	4	0	36
Other	0	0	0	0	0
Risk not Specified	4	31	0	11	46
Missing	104	787	24	240	855
MALE TOTAL	**170**	**812**	**42**	**302**	**1,326**

FEMALE	White	African-American	Other	Missing	Total
IDU	18	43	1	8	70
Heterosexual PR	8	100	11	20	139
Heterosexual PI	0	23	1	3	27
Other	0	3	0	0	3
Risk not Specified	1	13	4	8	26
Missing	50	285	31	76	542
FEMALE TOTAL	**77**	**467**	**48**	**215**	**807**
Missing Gender	**0**	**3**	**0**	**2**	**5**
PEDIATRIC TOTAL	**0**	**2**	**0**	**3**	**5**
TOTAL	**247**	**1,284**	**90**	**522**	**2,143**

Table 3.6: Incident AIDS Cases in 2004 by Exposure Category and Race/Ethnicity for Adult/Adolescent Cases by Gender and for Pediatric Cases

MALE	White	African-American	Other	Total
MSM	60	142	7	209
IDU	37	234	6	277
MSM/IDU	4	14	2	20
Hemophiliac	1	1	0	2
Heterosexual	13	166	16	195
Transfusion	0	0	0	0
Risk not Specified	11	101	8	120
MALE TOTAL	**126**	**662**	**39**	**827**

FEMALE	White	African-American	Other	Total
IDU	23	145	1	169
Hemophiliac	0	0	0	0
Heterosexual	13	189	5	207
Transfusion	0	3	0	3
Risk not Specified	8	75	1	84
FEMALE TOTAL	**44**	**415**	**7**	**466**
PEDIATRIC TOTAL	**0**	**0**	**0**	**0**
TOTAL	**170**	**1,077**	**46**	**1,293**

CHAPTER 4: 2004 PREVALENCE

Prevalence measures are important indicators for health care services planning and for targeting populations for care and disease prevention. In this chapter, HIV and AIDS point prevalence (living cases on December 31, 2004) is described. Table 4.1 presents 2004 HIV and AIDS prevalent cases and rates by demographic variables, and Table 4.2 presents 2004 HIV and AIDS prevalent cases and rates by county.

Table 4.1: Distribution of the 2000 Maryland Population, 2004 Prevalent HIV Cases, 2004 Prevalent AIDS Cases, and HIV and AIDS Prevalence Rates by Gender, Race/Ethnicity, Age and Mode of Exposure

	2000 Maryland Population *****	2004 Prevalent HIV Cases		2004 Prevalent AIDS Cases		2004 HIV Prevalence Rate ******	2004 AIDS Prevalence Rate ******
MARYLAND	5,296,486	16,342	100.0%	12,781	100.0%	308.5	241.3
GENDER							
Male	2,557,794	10,119	62.1%	8,700	68.1%	395.6	340.1
Female	2,738,692	6,173	37.9%	4,081	31.9%	225.4	149.0
Missing*	-----	50	-----	0	-----	-----	-----
RACE/ETHNICITY							
White	3,286,547	1,812	13.3%	2,141	16.8%	55.1	65.1
African-American	1,464,735	11,254	82.9%	10,231	80.0%	768.3	698.5
Hispanic	227,916	218	1.6%	349	2.7%	95.6	153.1
Other	317,288	299	2.2%	60	0.5%	94.2	18.9
Missing*	-----	2,759	-----	0	-----	-----	-----
AGE (years)*							
<5	353,393	30	0.2%	4	0.0%	8.5	1.1
5-12	631,965	137	0.8%	54	0.4%	21.7	8.5
13-19	507,607	132	0.8%	125	1.0%	26.0	24.6
20-29	656,999	1,546	9.5%	507	4.0%	235.3	77.2
30-39	870,439	4,396	26.9%	2,888	22.6%	505.0	331.8
40-49	850,758	6,585	40.3%	5,662	44.3%	774.0	665.5
50-59	624,289	2,790	17.1%	2,841	22.2%	446.9	445.1
60+	801,036	726	4.4%	700	5.5%	90.6	87.4
EXPOSURE***							
MSM	-----	596	11.5%	2,854	24.1%	-----	-----
IDU	-----	1,933	37.5%	5,217	44.1%	-----	-----
MSM/IDU	-----	116	2.3%	417	3.5%	-----	-----
Hemophiliac/Transf.	-----	11	0.2%	82	0.7%	-----	-----
Heterosexual PR	-----	1,472	28.5%	3,075	26.0%	-----	-----
****Heterosexual PI	-----	810	15.7%	-----	-----	-----	-----
Pediatric	-----	203	3.9%	186	1.6%	-----	-----
Other	-----	17	0.4%	0	0.0%	-----	-----
Risk not Specified	-----	463	-----	950	-----	-----	-----
Missing	-----	10,721	-----	0	-----	-----	-----

* Missing data are not included in distribution percentages.
** Age on December 31, 2004.
*** Risk not specified and missing data are not included in distribution percentages.
MSM = Men who have sex with men.
IDU = Injection drug users.
MSM/IDU = Men who have sex with men and are injection drug users.
HetSexPR = Heterosexual contact with a partner who has or is at risk for HIV.
HetSexPI = Heterosexual contact with a partner of indeterminate risk for HIV.
**** Not a CDC defined category.
***** Census 2000.
****** Per 100,000 population.

Table 4.2: Distribution of the 2000 Maryland Population, 2004 Prevalent HIV and AIDS Cases, and 2004 HIV and AIDS Prevalence Rates by County

COUNTY	2000 Maryland Population*	2004 Prevalent HIV Cases		2004 Prevalent AIDS Cases		2004 HIV Prevalence Rate**	2004 AIDS Prevalence Rate**
		No.	%	No.	%		
Allegany	74,930	27	0.2%	26	0.2%	36.0	34.7
Anne Arundel	489,656	423	2.6%	428	3.3%	86.4	87.4
Baltimore City	651,154	8,309	50.8%	6,037	47.2%	1276.0	927.1
Baltimore County	754,292	1,139	7.0%	900	7.0%	151.0	119.3
Calvert	74,563	40	0.2%	38	0.3%	53.6	51.0
Caroline	29,772	29	0.2%	20	0.2%	97.4	67.2
Carroll	150,897	85	0.5%	47	0.4%	56.3	31.1
Cecil	85,951	38	0.2%	57	0.4%	44.2	66.3
Charles	120,546	110	0.7%	87	0.7%	91.3	72.2
Dorchester	30,674	49	0.3%	56	0.4%	159.7	182.6
Frederick	195,277	118	0.7%	105	0.8%	60.4	53.8
Garrett	29,846	5	0.0%	3	0.0%	16.8	10.1
Harford	218,590	156	1.0%	160	1.3%	71.4	73.2
Howard	247,842	143	0.9%	138	1.1%	57.7	55.7
Kent	19,197	16	0.1%	16	0.1%	83.3	83.3
Montgomery	873,341	1,110	6.8%	1,196	9.4%	127.1	136.9
Prince George's	801,515	2,277	13.9%	2,251	17.6%	284.1	280.8
Queen Anne's	40,563	15	0.1%	21	0.2%	37.0	51.8
Saint Mary's	86,211	31	0.2%	36	0.3%	36.0	41.8
Somerset	24,747	41	0.3%	22	0.2%	165.7	88.9
Talbot	33,812	23	0.1%	32	0.3%	68.0	94.6
Washington	131,923	158	1.0%	88	0.7%	119.8	66.7
Wicomico	84,644	166	1.0%	83	0.6%	196.1	98.1
Worcester	46,543	47	0.3%	35	0.3%	101.0	75.2
Corrections	-------	1,787	10.9%	899	7.0%	-------	-------
TOTAL	**5,296,486**	**16,342**	**100.0%**	**12,781**	**100.0%**	**308.5**	**241.3**

*Census 2000.
**Per 100,000 population.

Tables 4.3 and 4.4 present prevalent HIV and AIDS cases on December 31, 2004 by age group and race/ethnicity for males and females. African-American males 30-49 years of age comprise the largest group of prevalent HIV cases (4,664 of 16,342, or 29%) and the largest group of prevalent AIDS cases (4,295 of 12,781, or 34%). African-American females 30-49 years of age make up the second largest group of prevalent HIV cases (2,939 of 16,342, or 18%) and the second largest group of prevalent AIDS cases (2,557 of 12,781, or 20%).

Table 4.3: Prevalent HIV Cases on December 31, 2004 by Age*, Race/Ethnicity and Gender

MALE	White	African-American	Other	Missing	Total
<5	2	12	0	6	20
5-12	9	46	5	21	81
13-19	3	38	2	11	54
20-29	86	530	21	124	761
30-39	347	1,502	98	381	2,328
40-49	492	3,162	108	595	4,357
50-59	203	1,438	46	310	1,997
60+	55	335	14	117	521
MALE TOTAL	**1,197**	**7,061**	**296**	**1,565**	**10,119**

FEMALE	White	African-American	Other	Missing	Total
<5	0	3	0	5	8
5-12	1	40	1	14	56
13-19	5	54	1	18	78
20-29	98	467	31	184	780
30-39	232	1,331	116	380	2,059
40-49	189	1,608	44	364	2,205
50-59	66	539	24	154	783
60+	17	143	1	43	204
FEMALE TOTAL	**608**	**4,181**	**218**	**1,166**	**6,173**
Missing Gender	**7**	**12**	**3**	**28**	**50**
TOTAL	**1,812**	**11,254**	**517**	**2,759**	**16,342**

*Age on December 31, 2004.

Table 4.4: Prevalent AIDS Cases on December 31, 2004 by Age*, Race/Ethnicity and Gender

MALE	White	African-American	Other	Total
<5	0	4	0	4
5-12	1	22	1	24
13-19	3	62	1	66
20-29	32	218	26	276
30-39	304	1,282	101	1,687
40-49	822	3,013	116	3,951
50-59	413	1,668	72	2,153
60+	133	391	15	539
MALE TOTAL	**1,708**	**6,660**	**332**	**8,700**

FEMALE	White	African-American	Other	Total
<5	0	0	0	0
5-12	1	29	0	30
13-19	4	55	0	59
20-29	25	196	10	231
30-39	136	1,036	29	1,201
40-49	166	1,521	24	1,711
50-59	81	598	9	688
60+	20	136	5	161
FEMALE TOTAL	**433**	**3,571**	**77**	**4,081**
TOTAL	**2,141**	**10,231**	**409**	**12,781**

*Age on December 31, 2004.

Tables 4.5 and 4.6 present prevalent HIV cases and prevalent AIDS cases on December 31, 2004 by exposure category and race/ethnicity for males and females and for pediatric AIDS cases. African-American males exposed to HIV through injection drug use (IDU) made up the largest group of prevalent HIV cases (1,085 of 16,342, or 7%) and the largest group of prevalent AIDS cases (3,112 of 12,781, or 24%). African-American males exposed to HIV through heterosexual sex with a partner at risk (HetSexPR) made up the second largest group of prevalent HIV cases (692 of 16,342, or 4%), while African-American men who have sex with men (MSM) made up the second largest group of prevalent AIDS cases (1,688 of 12,781, or 13%), followed closely by African-American women who were exposed to HIV through heterosexual sex with a partner at risk (HetSexPR) (1,673 of 12,781, or 13%) and African-American women exposed to HIV through injection drug use (IDU) (1,482 of 12,781, or 12%).

Table 4.5 Prevalent HIV Cases on December 31, 2004 by Exposure Category and Race/Ethnicity for Adult/Adolescent Cases by Gender and for Pediatric Exposure Cases

MALE	White	African-American	Other	Missing	Total
MSM	123	399	18	56	596
IDU	99	1,085	19	58	1,261
MSM/IDU	19	88	1	6	114
Hemophiliac/Transf.	2	1	0	2	5
Heterosexual PR	45	692	19	26	782
Heterosexual PI	15	390	16	16	437
Other	3	1	0	0	4
Risk not Specified	23	245	1	11	280
Missing	856	4,093	218	1,358	6,525
MALE TOTAL	**1,185**	**6,994**	**292**	**1,533**	**10,004**

FEMALE	White	African-American	Other	Missing	Total
IDU	128	482	6	52	668
Hemophiliac/Transf	0	5	1	0	6
Heterosexual PR	54	567	21	48	690
Heterosexual PI	16	298	19	39	372
Other	3	6	3	2	14
Risk not Specified	13	155	5	10	183
Missing	391	2,610	162	991	4,154
FEMALE TOTAL	**605**	**4,123**	**217**	**1,142**	**6,087**

MISSING GENDER	White	African-American	Other	Missing	Total
IDU	3	1	0	0	4
MSM/IDU	0	1	0	0	1
Heterosexual PR	0	0	0	0	0
Heterosexual PI	0	0	0	1	1
Missing	5	10	2	25	42
MISSING GENDER TOTAL	**8**	**12**	**2**	**26**	**48**
PEDIATRIC TOTAL	**14**	**125**	**6**	**58**	**203**
TOTAL	**1,812**	**11,254**	**517**	**2,759**	**16,342**

Table 4.6: Prevalent AIDS Cases on December 31, 2004 by Exposure Category and Race/Ethnicity for Adult/Adolescent Cases by Gender and for Pediatric Exposure Cases

MALE	White	African-American	Other	Missing	Total
MSM	1,042	1,688	124	0	2,854
IDU	337	3,112	53	0	3,502
MSM/IDU	92	314	11	0	417
Hemophiliac	14	7	2	0	23
Heterosexual	112	985	88	0	1,185
Transfusion	15	10	1	0	26
Other	0	0	0	0	0
Risk not Specified	91	454	51	0	596
MALE TOTAL	**1,703**	**6,570**	**330**	**0**	**8,603**

FEMALE	White	African-American	Other	Missing	Total
IDU	220	1,482	13	0	1,715
Hemophiliac	1	0	0	0	1
Heterosexual	167	1,673	50	0	1,890
Transfusion	8	23	1	0	32
Risk not Specified	31	310	13	0	354
FEMALE TOTAL	**427**	**3,488**	**77**	**0**	**3,992**

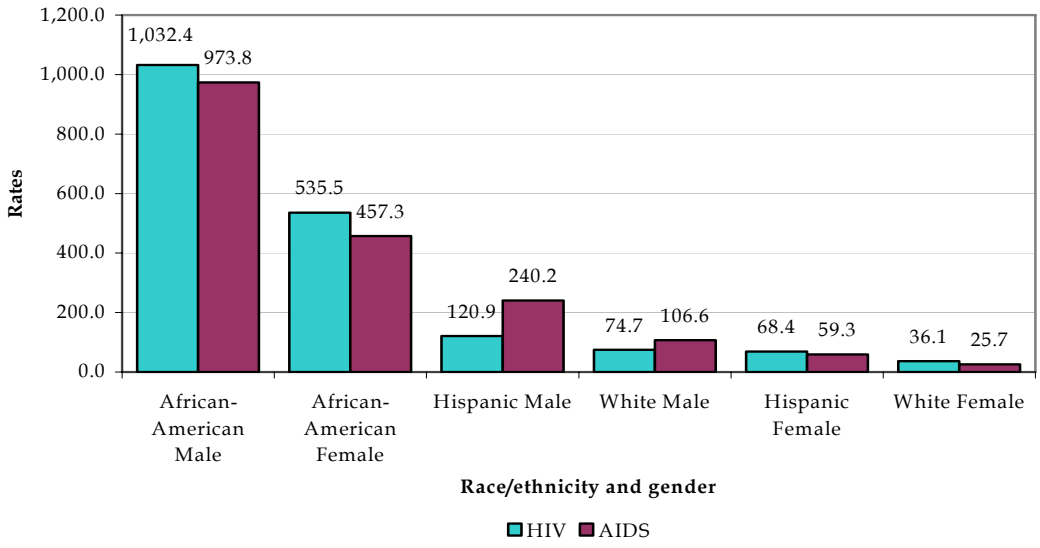
PEDIATRIC	White	African-American	Other	Missing	Total
Ped. Hemophilia	0	0	0	0	0
Mother IDU	5	67	0	0	72
Mother Sex w/IDU	1	17	0	0	18
Mother Sex w/HIV	0	5	0	0	5
Mother Transfus.	0	1	0	0	1
Mother HIV	3	77	2	0	82
Ped. Transfus.	2	2	0	0	4
Ped. Other	0	3	0	0	3
Confirmed Other	0	1	0	0	1
PEDIATRIC TOTAL	**11**	**173**	**2**	**0**	**186**

TOTAL	**2,141**	**10,231**	**409**	**0**	**12,781**

HIV and AIDS Prevalence Rates by Race/Ethnicity and Gender

HIV and AIDS prevalence rates for 2004 by race/ethnicity and gender are shown in Figure 4.1. The highest HIV and AIDS prevalence rates for 2004 were among African-Americans. The rates for African-American males (HIV: 1,032.4 per 100,000 population; AIDS: 973.8 per 100,000 population) were substantially higher than all other groups, and approximately twice as high as HIV and AIDS prevalence rates for African-American females (HIV: 535.5 per 100,000 population; and AIDS: 457.3 per 100,000 population). Hispanic females and white females had the lowest HIV and AIDS prevalence rates in 2004.

Figure 4.1: 2004 HIV and AIDS Prevalence Rates per 100,000 Population by Race/Ethnicity and Gender



HIV and AIDS Prevalence by County

Tables 4.7 and 4.8 present the distributions of gender and race/ethnicity among prevalent HIV and AIDS cases in 2004 by county. The highest numbers of prevalent HIV cases among males in 2004 were found in Baltimore City (4,939), the Division of Correction (1,488), and Prince George's County (1,244). The highest numbers of prevalent HIV cases among females in 2004 were found in Baltimore City (3,341), Prince George's County, (1,027), and Montgomery County (445). The highest numbers of prevalent AIDS cases in 2004 for both males and females were found in Baltimore City (males: 3,955, females: 2,082), Prince George's County (males: 1,499, females: 752), and Montgomery County (males: 813, females: 383). In Baltimore City, suburban Washington, and the Division of Correction, 77% to 90% of prevalent HIV and AIDS cases were African-American. Suburban Washington (Montgomery and Prince George's Counties) had the highest number of Hispanic HIV and AIDS cases in the state.

Tables 4.9 and 4.10 present the age distributions of prevalent HIV and AIDS cases in 2004 by county. The age distributions were similar across the state, the highest prevalence among 40-49 year olds.

Tables 4.11 and 4.12 present the distributions of the modes of exposure among prevalent HIV and AIDS cases. HIV and AIDS exposure categories differ greatly by county. While IDUs dominate the exposure distribution for prevalent HIV and AIDS cases in Maryland, the majority of cases within this exposure group were from Baltimore City and the Division of Correction. In the Western counties, MSM was the most common exposure group; in suburban Baltimore, the most common modes of exposure were MSM, IDU and heterosexual exposure. In the Eastern counties, the most common modes of exposure were MSM and heterosexual contact; and, in the Southern and Suburban Washington, D.C. counties, the most common mode of exposure was heterosexual contact. These varied distributions indicate the importance of considering each county or region individually in order to identify high-risk populations for prevention efforts, as well as highly affected populations for targeting HIV and AIDS health services.

Table 4.7: Distribution of Gender and Race/Ethnicity among Prevalent HIV Cases on December 31, 2004

COUNTY	Total	Male	Female	Missing	White	African-American	Hispanic	Other	Missing
Allegany	26	21	5	0	18	9	0	0	0
Anne Arundel	423	260	161	2	112	199	6	4	102
Baltimore City	8,309	4,939	3,341	29	687	6,275	28	67	1,252
Baltimore County	1,139	705	431	3	206	625	14	17	277
Calvert	40	21	19	0	15	16	0	0	9
Caroline	29	20	9	0	7	18	0	3	1
Carroll	85	40	45	0	38	41	2	0	4
Cecil	38	22	16	0	11	13	0	0	14
Charles	110	63	46	1	20	69	2	0	19
Dorchester	48	19	29	0	13	30	3	1	1
Frederick	119	78	41	0	56	41	3	0	19
Garrett	5	2	3	0	5	0	0	0	0
Harford	156	101	55	0	44	76	8	1	27
Howard	143	103	40	0	28	63	2	3	47
Kent	16	4	12	0	2	10	0	1	3
Montgomery	1,110	659	445	6	117	473	82	135	303
Prince George's	2,277	1,244	1,027	6	101	1,483	52	53	588
Queen Anne's	15	10	5	0	7	5	0	0	3
Saint Mary's	31	17	14	0	9	17	0	0	5
Somerset	41	30	10	1	4	33	1	0	3
Talbot	23	17	6	0	8	14	0	0	1
Washington	158	122	36	0	76	39	5	3	35
Wicomico	166	99	67	0	41	112	3	1	9
Worcester	48	35	13	0	20	20	1	0	7
Corrections	1,787	1,488	297	2	168	1,573	6	10	30
TOTAL	**16,342**	**10,119**	**6,173**	**50**	**1,812**	**11,254**	**218**	**299**	**2,759**

Table 4.8: Distribution of Gender and Race/Ethnicity among Prevalent AIDS Cases on December 31, 2004

COUNTY	Total	Male	Female	Missing	White	African-American	Hispanic	Other	Missing
Allegany	26	22	4	0	19	6	1	0	0
Anne Arundel	428	304	124	0	144	262	21	1	0
Baltimore City	6,037	3,955	2,082	0	629	5,331	59	18	0
Baltimore County	900	607	293	0	310	558	21	11	0
Calvert	38	26	12	0	15	23	0	0	0
Caroline	20	12	8	0	6	13	1	0	0
Carroll	47	35	12	0	29	16	0	2	0
Cecil	57	39	18	0	36	20	1	0	0
Charles	87	58	29	0	26	59	1	1	0
Dorchester	56	38	18	0	11	44	1	0	0
Frederick	105	77	28	0	56	37	10	2	0
Garrett	3	2	1	0	3	0	0	0	0
Harford	160	107	53	0	72	83	3	2	0
Howard	138	97	41	0	56	74	8	0	0
Kent	16	12	4	0	4	10	2	0	0
Montgomery	1,196	813	383	0	295	747	140	14	0
Prince George's	2,251	1,499	752	0	201	1,971	72	7	0
Queen Anne's	21	14	7	0	11	9	0	1	0
Saint Mary's	36	20	16	0	15	20	1	0	0
Somerset	22	16	6	0	6	16	0	0	0
Talbot	32	26	6	0	12	19	1	0	0
Washington	88	67	21	0	58	28	2	0	0
Wicomico	83	56	27	0	28	53	2	0	0
Worcester	35	22	13	0	16	18	0	1	0
Corrections	899	776	123	0	83	814	2	0	0
TOTAL	**12,781**	**8,700**	**4,081**	**0**	**2,141**	**10,231**	**349**	**60**	**0**

Table 4.9: Distribution of Current Age Groups among Prevalent HIV Cases on December 31, 2004

COUNTY	Total	<5	5-12	13-19	20-29	30-39	40-49	50-59	60+
Allegany	26	0	1	0	4	5	11	3	2
Anne Arundel	423	0	4	6	30	143	168	61	11
Baltimore City	8,309	17	88	73	717	1,965	3,434	1,583	432
Baltimore County	1,139	2	12	10	126	316	426	192	55
Calvert	40	0	0	0	7	10	14	6	3
Caroline	29	0	0	1	5	15	4	4	0
Carroll	85	0	1	1	6	28	41	8	0
Cecil	38	0	0	0	3	14	10	10	1
Charles	110	0	0	1	5	47	37	15	5
Dorchester	48	0	0	0	9	19	13	6	1
Frederick	119	1	3	3	14	28	51	18	1
Garrett	5	0	0	0	0	0	5	0	0
Harford	156	0	2	1	18	42	54	29	10
Howard	143	1	0	0	12	38	58	27	7
Kent	16	0	0	1	5	4	5	1	0
Montgomery	1,110	5	11	5	128	391	370	153	47
Prince George's	2,277	4	7	26	345	778	718	317	82
Queen Anne's	15	0	0	0	2	3	6	3	1
Saint Mary's	31	0	0	0	5	12	6	4	4
Somerset	41	0	0	0	7	4	17	12	1
Talbot	23	0	0	2	1	10	5	4	1
Washington	158	0	1	0	22	42	60	22	11
Wicomico	166	0	2	0	11	31	85	26	11
Worcester	48	0	0	1	8	8	28	2	1
Corrections	1,787	0	5	1	56	443	959	284	39
TOTAL	**16,342**	**30**	**137**	**132**	**1,546**	**4,396**	**6,585**	**2,790**	**726**

Table 4.10: Distribution of Current Age Groups among Prevalent AIDS Cases on December 31, 2004

COUNTY	Total	<5	5-12	13-19	20-29	30-39	40-49	50-59	60+
Allegany	26	0	0	0	1	8	10	6	1
Anne Arundel	428	0	4	3	20	103	180	91	27
Baltimore City	6,037	2	29	74	208	1,162	2,745	1,474	343
Baltimore County	900	0	2	7	32	241	366	200	52
Calvert	38	0	0	1	0	1	26	8	2
Caroline	20	0	0	0	0	4	7	6	3
Carroll	47	0	0	0	1	11	19	13	3
Cecil	57	0	0	1	2	10	27	14	3
Charles	87	0	0	1	2	28	47	8	1
Dorchester	56	0	0	0	1	7	29	18	1
Frederick	105	0	0	1	4	25	52	16	7
Garrett	3	0	0	0	0	0	1	2	0
Harford	160	0	2	4	5	28	73	36	12
Howard	138	0	0	1	6	16	77	28	10
Kent	16	0	0	0	0	5	7	3	1
Montgomery	1,196	2	2	8	64	313	489	247	71
Prince George's	2,251	0	15	18	130	608	881	466	133
Queen Anne's	21	0	0	0	1	4	13	2	1
Saint Mary's	36	0	0	0	1	7	17	8	3
Somerset	22	0	0	0	0	6	4	10	2
Talbot	32	0	0	1	2	6	15	5	3
Washington	88	0	0	2	2	28	42	13	1
Wicomico	83	0	0	2	5	15	41	16	4
Worcester	35	0	0	0	0	9	18	5	3
Corrections	899	0	0	1	20	243	476	146	13
TOTAL	**12,781**	**4**	**54**	**125**	**507**	**2,888**	**5,662**	**2,841**	**700**

Table 4.11: Distribution of Mode of Exposure among Prevalent HIV Cases on December 31, 2004

COUNTY	Total	MSM	IDU	MSM/ IDU	Hemo/ Transf	HetSex PR	HetSex PI	Ped.	Other	RNS	Missing
Allegany	26	14	0	1	0	4	0	1	0	1	5
Anne Arundel	423	20	34	1	0	33	19	4	1	4	307
Baltimore City	8,309	259	1,117	64	3	746	311	124	6	330	5,349
Baltimore County	1,139	46	75	9	0	78	29	20	1	39	842
Calvert	40	0	3	0	0	8	0	0	1	0	28
Caroline	29	1	1	0	0	9	4	1	0	0	13
Carroll	85	4	20	0	0	8	0	1	0	0	52
Cecil	38	0	3	0	0	4	0	0	0	0	31
Charles	110	6	4	4	0	19	3	0	0	0	74
Dorchester	48	1	2	0	1	14	4	0	0	0	26
Frederick	119	9	10	0	0	13	3	4	0	1	79
Garrett	5	0	3	0	0	1	0	0	0	0	1
Harford	156	13	10	0	0	38	2	2	0	2	89
Howard	143	4	0	0	0	8	4	2	0	2	123
Kent	16	0	0	0	0	6	3	0	1	0	6
Montgomery	1,110	38	25	4	2	37	78	19	4	5	898
Prince George's	2,277	103	60	5	4	183	220	15	1	23	1,663
Queen Anne's	15	1	0	0	0	3	2	1	0	1	7
Saint Mary's	31	3	1	0	0	4	0	0	0	1	22
Somerset	41	2	5	0	0	6	1	0	0	0	27
Talbot	23	5	0	0	0	4	1	0	0	1	12
Washington	158	28	13	8	0	16	8	1	2	2	80
Wicomico	166	7	5	0	0	25	9	2	0	1	117
Worcester	48	5	3	0	0	4	3	1	0	0	32
Corrections	1,787	27	539	20	1	201	106	5	0	50	838
TOTAL	**16,342**	**596**	**1,933**	**116**	**11**	**1,472**	**810**	**203**	**17**	**463**	**10,721**

Table 4.12: Distribution of Mode of Exposure among Prevalent AIDS Cases on December 31, 2004

COUNTY	Total	MSM	IDU	MSM/ IDU	Hemo/ Transf	HetSex PR	Ped.	Other	RNS
Allegany	26	15	5	1	0	4	0	0	1
Anne Arundel	428	138	111	10	6	131	9	0	23
Baltimore City	6,037	1,028	3,238	215	11	1,256	103	0	186
Baltimore County	900	247	291	43	8	226	8	0	77
Calvert	38	7	5	1	0	18	1	0	6
Caroline	20	3	4	0	0	10	0	0	3
Carroll	47	16	13	3	2	6	0	0	7
Cecil	57	19	18	3	0	15	1	0	1
Charles	87	30	13	2	3	32	1	0	6
Dorchester	56	16	11	3	0	18	0	0	8
Frederick	105	44	21	3	2	25	1	0	9
Garrett	3	2	0	0	0	1	0	0	0
Harford	160	39	41	6	10	36	7	0	21
Howard	138	52	22	3	1	46	1	0	13
Kent	16	7	5	0	0	3	0	0	1
Montgomery	1,196	389	140	33	17	394	15	0	208
Prince George's	2,251	651	416	44	16	753	34	0	337
Queen Anne's	21	8	4	1	0	6	0	0	2
Saint Mary's	36	13	5	1	0	12	0	0	5
Somerset	22	8	4	1	0	7	0	0	2
Talbot	32	14	7	2	0	4	1	0	4
Washington	88	38	18	5	4	21	1	0	1
Wicomico	83	26	24	0	1	18	2	0	12
Worcester	35	12	7	0	0	10	0	0	6
Corrections	899	32	794	37	1	23	1	0	1
TOTAL	**12,781**	**2,854**	**5,217**	**417**	**82**	**3,075**	**186**	**0**	**950**

CHAPTER 5: TRENDS IN HIV AND AIDS CASES

Trends by Demographics

Trends are important indicators of which populations have been affected by the epidemic in the past and of which populations may be affected in the future. The proportions of HIV and AIDS cases by gender, race/ethnicity, age group, jurisdiction, and exposure category are shown by year in the following tables and line graphs. Complete data are presented in the tables, and specific categories are shown in the line graphs.

Gender

The percentages of HIV and AIDS cases by gender for each year of diagnosis are presented in Tables 5.1 and 5.2, and are illustrated in Figures 5.1 and 5.2. Figures 5.1 and 5.2 illustrate that since 1994, when HIV surveillance began, approximately two thirds of HIV positive cases have been male, and that the gender difference among AIDS cases has decreased.

Table 5.1: Gender Distribution of HIV Cases by Year of Diagnosis

YEAR	Male		Female		Missing*	Total
	No.	%	No.	%		
1994	2,069	66.4%	1,047	33.6%	19	3,135
1995	1,678	67.0%	828	33.0%	12	2,518
1996	1,725	64.0%	970	36.0%	3	2,698
1997	1,545	64.9%	835	35.1%	10	2,390
1998	1,613	62.5%	969	37.5%	6	2,588
1999	1,517	64.1%	850	35.9%	5	2,372
2000	1,477	62.1%	901	37.9%	7	2,385
2001	1,460	62.1%	891	37.9%	4	2,355
2002	1,375	62.8%	813	37.2%	4	2,192
2003	1,239	64.1%	696	35.9%	6	1,941
2004	1,330	62.2%	808	37.8%	5	2,143

*Cases missing gender are excluded from percent distributions.

Table 5.2: Gender Distribution of AIDS Cases by Year of Diagnosis

YEAR	Male		Female		Total
	No.	%	No.	%	
1985	190	89.6%	22	10.4%	212
1986	287	89.7%	33	10.3%	320
1987	438	87.1%	65	12.9%	503
1988	597	85.9%	98	14.1%	695
1989	778	84.1%	147	15.9%	925
1990	939	79.7%	239	20.3%	1,178
1991	1,160	77.8%	331	22.2%	1,491
1992	1,549	78.5%	424	21.5%	1,973
1993	1,746	76.7%	532	23.3%	2,278
1994	1,622	74.6%	551	25.4%	2,173
1995	1,561	72.6%	590	27.4%	2,151
1996	1,362	70.5%	571	29.5%	1,933
1997	1,113	67.5%	536	32.5%	1,649
1998	1,047	69.7%	456	30.3%	1,503
1999	1,015	67.3%	494	32.7%	1,509
2000	903	66.8%	449	33.2%	1,352
2001	1,005	66.5%	507	33.5%	1,512
2002	936	63.7%	534	36.3%	1,470
2003	988	64.8%	536	35.2%	1,524
2004	827	64.0%	466	36.0%	1,293

Figure 5.1: Proportion of HIV Cases by Year of Diagnosis and Gender

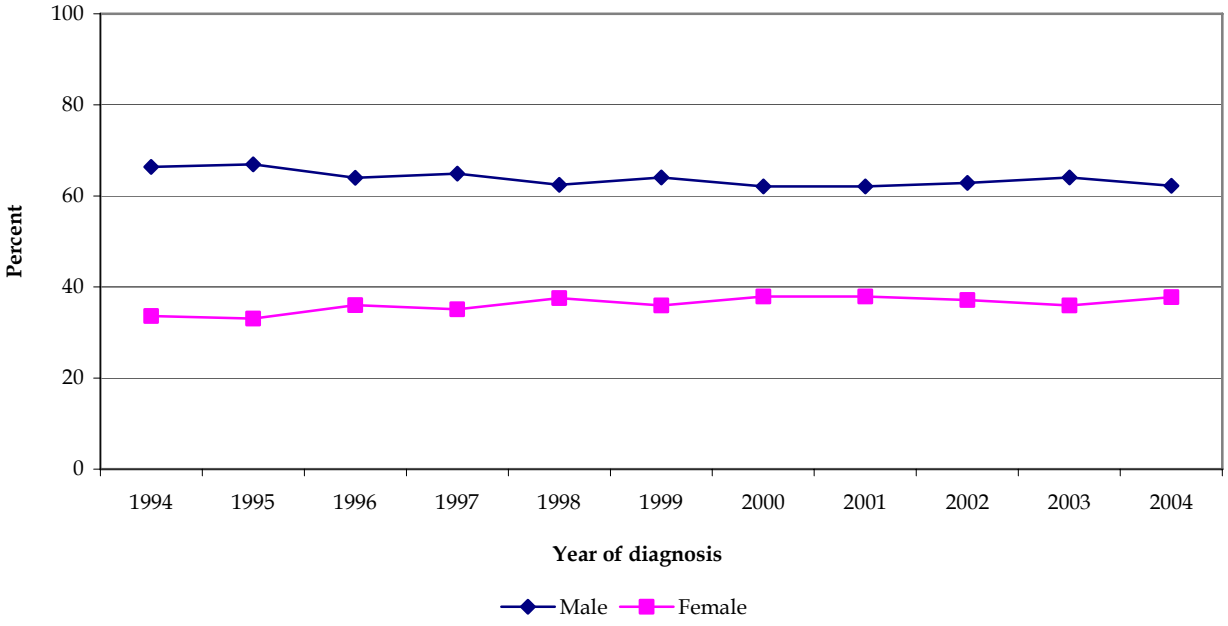
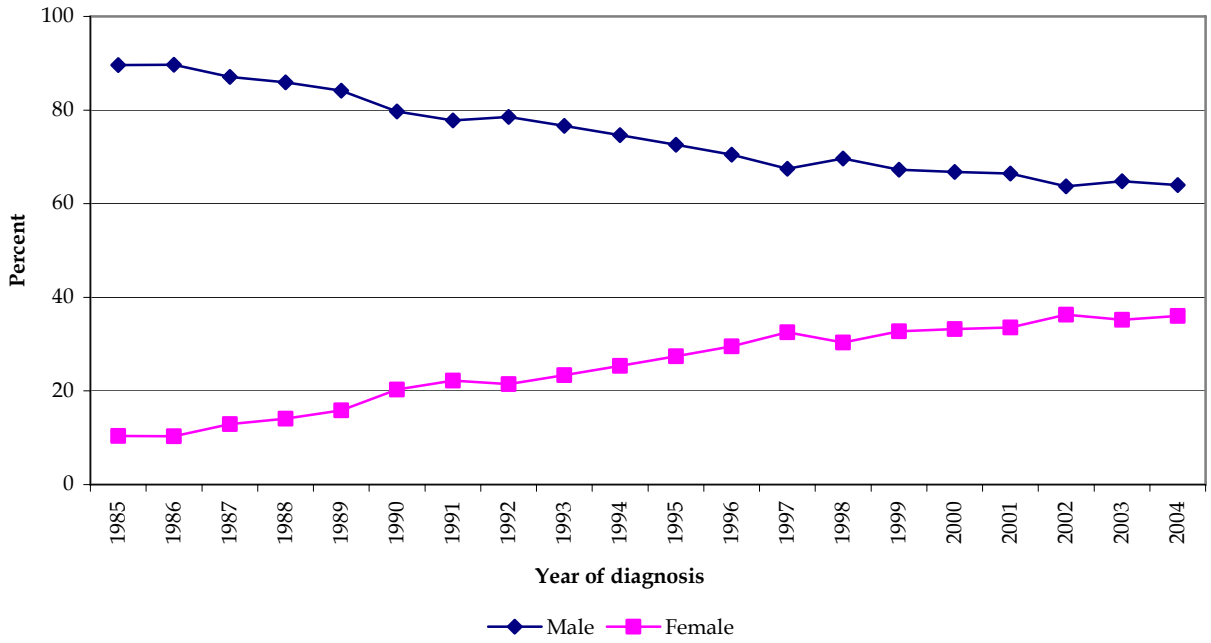


Figure 5.2: Proportion of AIDS Cases by Year of Diagnosis and Gender



Race/Ethnicity

The percentages of HIV and AIDS cases by race/ethnicity by year of diagnosis are presented in Tables 5.3 and 5.4, and are illustrated in Figures 5.3 and 5.4. African-Americans have comprised 79-85% of HIV cases annually since 1994, when HIV surveillance began. Figures 5.3 and 5.4 illustrate the gap between the percentages of white AIDS cases and African-American AIDS cases in Maryland. Of AIDS cases diagnosed in 1985, 49% were African-American. In 2004, African-Americans comprised 83% of all AIDS cases, while whites represented 13% of AIDS cases. Hispanics have consistently accounted for 2-4% of all AIDS cases in Maryland.

Table 5.3: Race/Ethnicity Distribution of HIV Cases by Year of Diagnosis

YEAR	White		African-American		Hispanic		Other		Missing*	Total
	No.	%	No.	%	No.	%	No.	%		
1994	404	14.5%	2,322	83.4%	32	1.1%	27	1.0%	350	3,135
1995	325	13.9%	1,968	84.0%	31	1.3%	19	0.8%	175	2,518
1996	323	12.8%	2,135	84.7%	34	1.3%	30	1.2%	176	2,698
1997	277	12.9%	1,822	85.1%	26	1.2%	16	0.8%	249	2,390
1998	307	13.8%	1,878	84.1%	18	0.8%	29	1.3%	356	2,588
1999	236	11.6%	1,737	84.9%	31	1.5%	41	2.0%	327	2,372
2000	229	12.7%	1,489	82.5%	33	1.8%	53	3.0%	581	2,385
2001	253	13.2%	1,568	81.5%	37	1.9%	66	3.4%	431	2,355
2002	236	14.4%	1,329	81.2%	31	1.9%	40	2.5%	556	2,192
2003	208	13.5%	1,233	80.2%	31	2.0%	65	4.3%	404	1,941
2004	247	15.2%	1,284	79.2%	30	1.9%	60	3.7%	522	2,143

*Cases missing race are excluded from percent distributions.

Table 5.4: Race/Ethnicity Distribution of AIDS Cases by Year of Diagnosis

YEAR	White		African-American		Hispanic		Other		Missing*	Total
	No.	%	No.	%	No.	%	No.	%		
1985	100	47.2%	104	49.0%	8	3.8%	0	0.0%	0	212
1986	141	44.1%	167	52.2%	10	3.1%	2	0.6%	0	320
1987	226	44.9%	268	53.3%	9	1.8%	0	0.0%	0	503
1988	250	36.0%	431	62.0%	14	2.0%	0	0.0%	0	695
1989	289	31.2%	612	66.2%	19	2.1%	5	0.5%	0	925
1990	326	27.7%	830	70.5%	18	1.5%	4	0.3%	0	1,178
1991	347	23.3%	1,105	74.1%	35	2.3%	4	0.3%	0	1,491
1992	434	22.0%	1,502	76.1%	30	1.5%	7	0.4%	0	1,973
1993	460	20.2%	1,767	77.6%	41	1.8%	10	0.4%	0	2,278
1994	415	19.1%	1,715	78.9%	38	1.8%	5	0.2%	0	2,173
1995	416	19.3%	1,688	78.5%	40	1.9%	7	0.3%	0	2,151
1996	301	15.6%	1,599	82.7%	26	1.3%	7	0.4%	0	1,933
1997	227	13.8%	1,390	84.3%	29	1.7%	3	0.2%	0	1,649
1998	216	14.4%	1,262	84.0%	25	1.6%	0	0.0%	0	1,503
1999	199	13.2%	1,276	84.5%	30	2.0%	4	0.3%	0	1,509
2000	166	12.3%	1,141	84.4%	32	2.3%	13	1.0%	0	1,352
2001	210	13.9%	1,268	83.9%	29	1.9%	5	0.3%	0	1,512
2002	207	14.1%	1,221	83.1%	30	2.0%	12	0.8%	0	1,470
2003	184	12.1%	1,281	84.0%	47	3.1%	12	0.8%	0	1,524
2004	170	13.1%	1,077	83.3%	35	2.7%	11	0.9%	0	1,293

*Cases missing race are excluded from percent distributions.

Figure 5.3: Proportion of HIV Cases by Year of Diagnosis and Race/Ethnicity

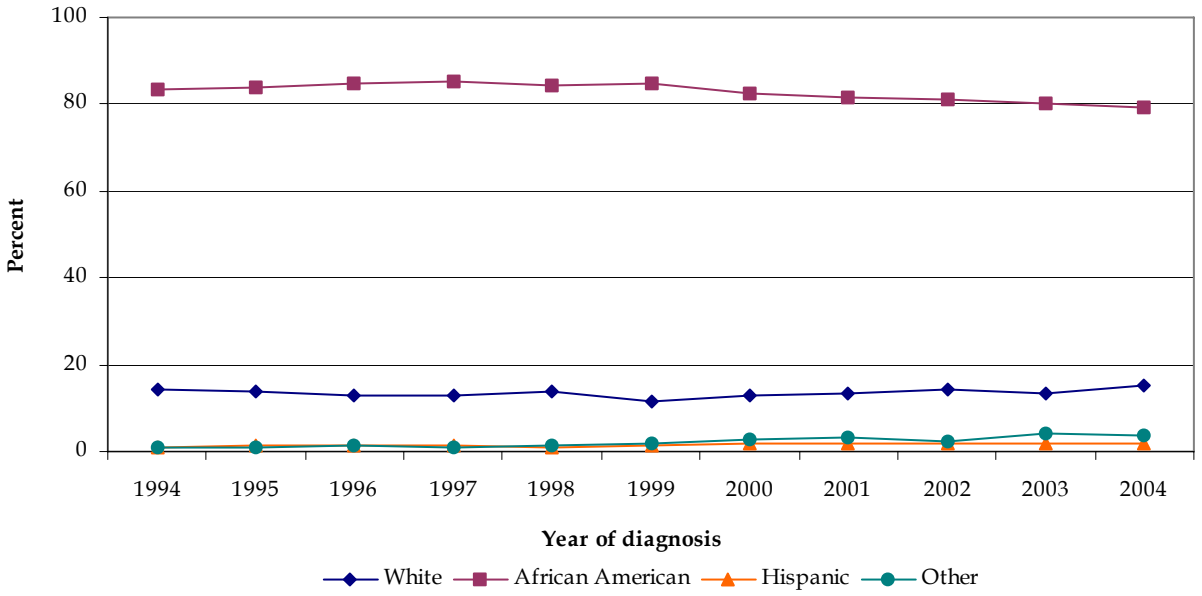
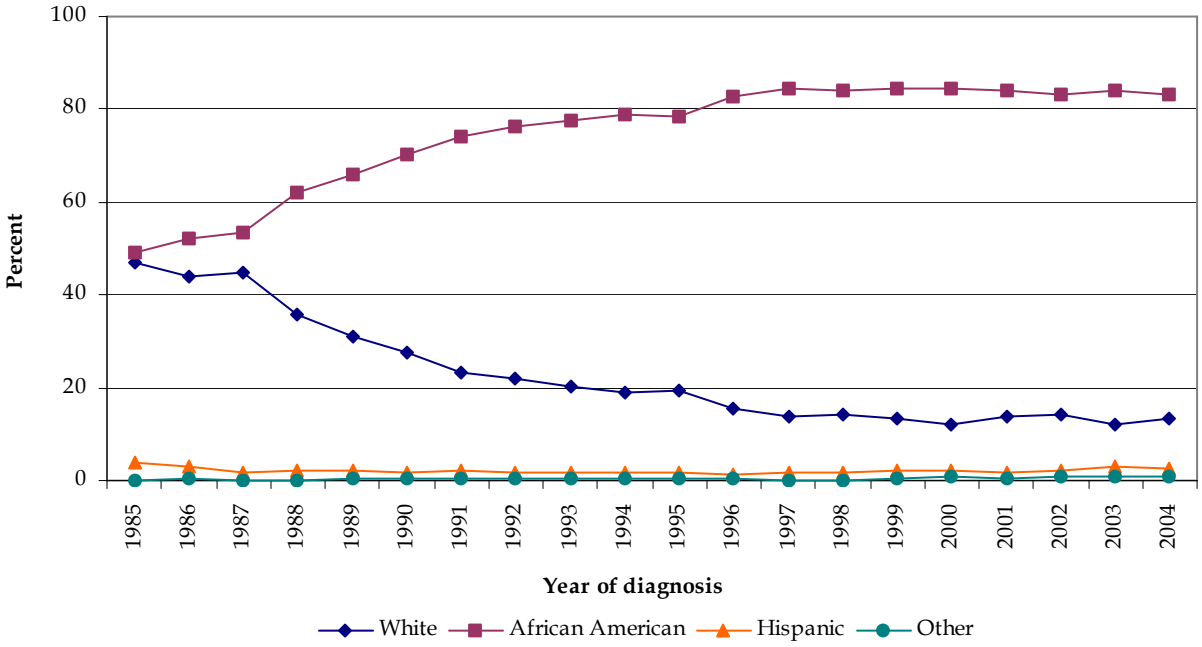


Figure 5.4: Proportion of AIDS Cases by Year of Diagnosis and Race/Ethnicity



Age Group

The percentages of HIV and AIDS cases by age group for each year of diagnosis are presented in Tables 5.5 and 5.6, and are illustrated in Figures 5.5 and 5.6. Throughout the epidemic, HIV and AIDS cases have been concentrated in three age groups: 20-29 years, 30-39 years, and 40-49 years. Figures 5.5 and 5.6 illustrate the proportions of all HIV and AIDS cases within five different age groups: less than 20 years, 20-29 years, 30-39 years, 40-49 years, and greater than 50 years. Since the younger age groups (less than 20 years) and older age groups (greater than 50 years) represent a low proportion of all HIV and AIDS cases, these age groups are presented in Figures 5.7 and 5.8 on a 0-20% scale so that trends in these younger and older age groups are easily identified.

Table 5.5: Age Group* Distribution of HIV Cases by Year of Diagnosis

YEAR	<5		5-12		13-19		20-29		30-39		40-49		50-59		60+	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1994	35	1.1%	0	0.0%	74	2.4%	682	21.8%	1,463	46.7%	704	22.5%	139	4.3%	37	1.2%
1995	20	0.8%	4	0.2%	47	1.9%	523	20.8%	1,155	45.9%	594	23.6%	126	5.0%	48	1.8%
1996	18	0.7%	2	0.1%	53	2.0%	516	19.1%	1,237	45.7%	696	25.8%	128	4.8%	47	1.8%
1997	11	0.5%	2	0.1%	31	1.3%	455	19.0%	1,116	46.7%	594	24.8%	133	5.6%	47	2.0%
1998	18	0.7%	13	0.5%	40	1.6%	478	18.4%	1,117	43.2%	682	26.4%	185	7.1%	56	2.1%
1999	13	0.5%	9	0.4%	55	2.3%	351	14.8%	983	41.4%	725	30.6%	188	7.9%	49	2.1%
2000	20	0.9%	4	0.2%	48	2.0%	357	15.0%	958	40.2%	714	29.9%	199	8.3%	84	3.5%
2001	11	0.5%	3	0.1%	50	2.1%	383	16.3%	848	36.0%	777	33.0%	220	9.3%	64	2.7%
2002	9	0.4%	1	0.1%	68	3.1%	389	17.7%	760	34.7%	685	31.3%	210	9.6%	70	3.1%
2003	6	0.3%	1	0.1%	72	3.7%	319	16.4%	627	32.3%	614	31.6%	239	12.3%	64	3.3%
2004	5	0.2%	1	0.1%	60	2.8%	421	19.6%	666	31.1%	673	31.4%	255	11.9%	62	2.9%

*Age at diagnosis.

Table 5.6: Age Group* Distribution of AIDS Cases by Year of Diagnosis

YEAR	<5		5-12		13-19		20-29		30-39		40-49		50-59		60+	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1985	7	3.3%	1	0.5%	1	0.5%	45	21.2%	85	40.1%	38	17.9%	19	9.0%	16	7.5%
1986	6	1.9%	0	0.0%	2	0.6%	66	20.6%	133	41.7%	68	21.3%	28	8.7%	17	5.2%
1987	11	2.2%	3	0.6%	5	1.0%	115	22.8%	209	41.6%	98	19.4%	37	7.4%	25	5.0%
1988	16	2.3%	3	0.4%	2	0.3%	164	23.6%	301	43.3%	142	20.4%	42	6.0%	25	3.7%
1989	22	2.4%	3	0.3%	4	0.4%	207	22.4%	407	44.0%	192	20.8%	62	6.7%	28	3.0%
1990	19	1.6%	2	0.2%	7	0.6%	242	20.5%	538	45.7%	249	21.1%	77	6.5%	44	3.8%
1991	33	2.2%	3	0.2%	3	0.2%	271	18.2%	683	45.8%	378	25.3%	88	5.9%	32	2.2%
1992	26	1.3%	9	0.5%	9	0.5%	343	17.4%	917	46.4%	490	24.8%	128	6.5%	51	2.6%
1993	29	1.3%	5	0.2%	7	0.3%	374	16.4%	1,091	47.9%	570	25.0%	166	7.3%	36	1.6%
1994	21	1.0%	5	0.2%	13	0.6%	317	14.6%	995	45.8%	618	28.4%	157	7.2%	47	2.2%
1995	13	0.6%	6	0.3%	6	0.3%	283	13.1%	994	46.2%	642	29.8%	158	7.4%	49	2.3%
1996	15	0.8%	7	0.4%	8	0.4%	245	12.7%	856	44.2%	619	32.0%	139	7.2%	44	2.3%
1997	9	0.6%	2	0.1%	7	0.4%	203	12.3%	736	44.6%	514	31.2%	119	7.2%	59	3.6%
1998	5	0.3%	4	0.3%	9	0.6%	169	11.1%	658	43.8%	479	31.9%	145	9.7%	34	2.3%
1999	7	0.5%	3	0.2%	10	0.7%	157	10.4%	622	41.2%	515	34.1%	147	9.7%	48	3.2%
2000	1	0.1%	4	0.3%	11	0.8%	144	10.7%	510	37.7%	473	35.0%	146	10.8%	63	4.6%
2001	3	0.2%	2	0.1%	11	0.7%	135	8.9%	535	35.4%	579	38.4%	194	12.8%	53	3.5%
2002	1	0.1%	1	0.1%	9	0.6%	166	11.3%	496	33.6%	554	37.6%	185	12.6%	58	4.0%
2003	0	0.0%	0	0.0%	15	1.0%	160	10.5%	515	33.7%	558	36.6%	205	13.5%	71	4.7%
2004	1	0.0%	2	0.2%	14	1.1%	135	10.4%	400	30.9%	495	38.3%	196	15.2%	50	3.9%

*Age at diagnosis.

Figure 5.5: Proportion of HIV Cases by Year of Diagnosis and Age Group

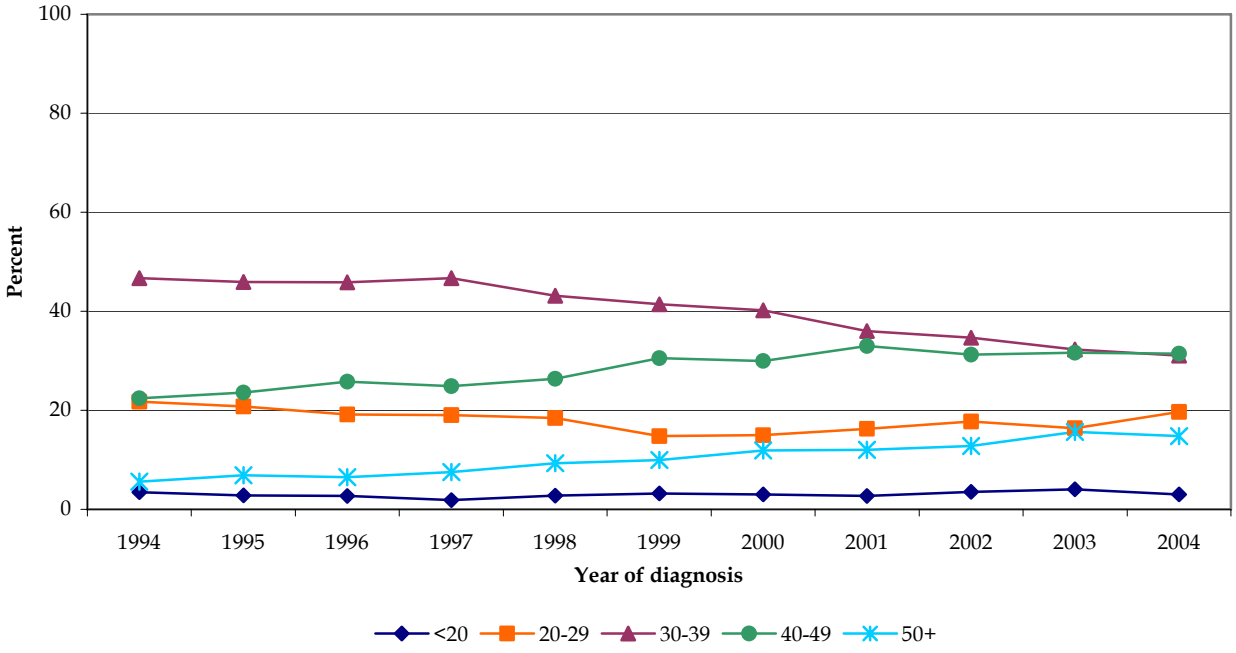
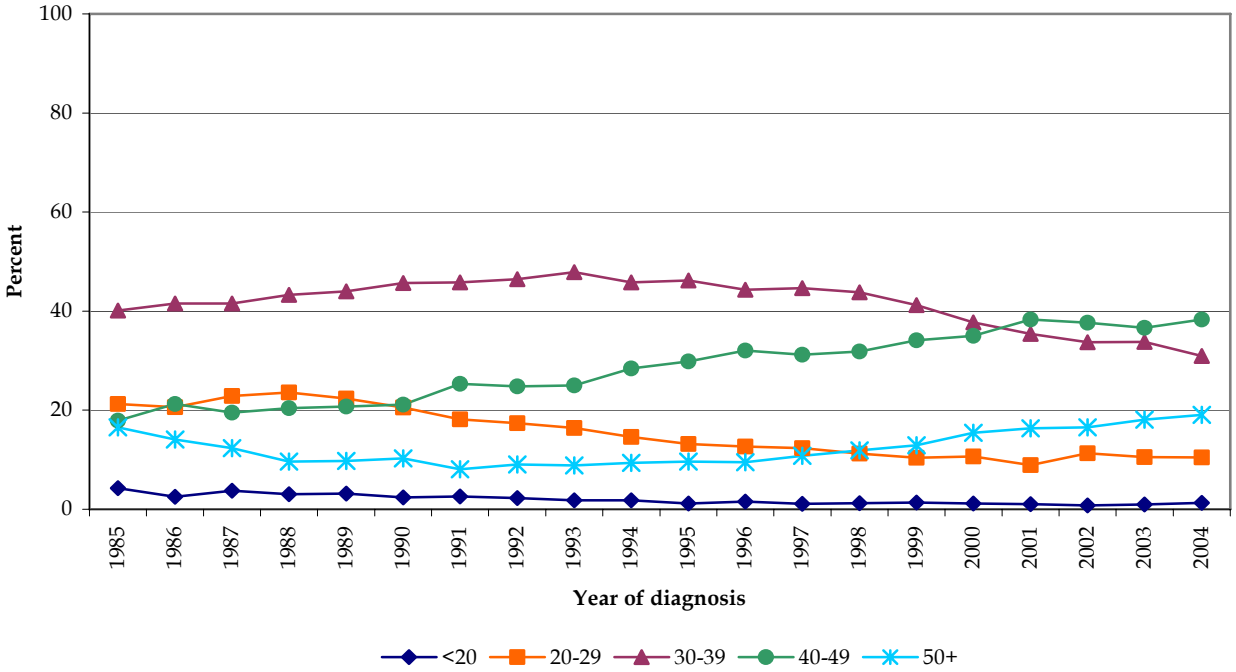


Figure 5.6: Proportion of AIDS Cases by Year of Diagnosis and Age Group



HIV and AIDS case proportions in children less than 5 years have declined from 1% in 1994 to 0.2% in 2004. The proportions of HIV and AIDS cases in 5-12 year olds has remained at less than 1%, and the proportions of HIV and AIDS cases in 13-19 year olds remained under 2.5% until 2002, when the HIV case percentage increased to 3.1% and then to 3.7% in 2003. HIV and AIDS case percentages in the 50-59 year old group have been increasing substantially since 1997, and represented 12% of new HIV diagnoses and 15% of AIDS diagnoses in 2004. Those in the 60 years and older group have fluctuated from 1-8% of HIV and AIDS cases since 1985.

Figure 5.7: Proportion of HIV Cases by Year of Diagnosis and Younger and Older Age Groups

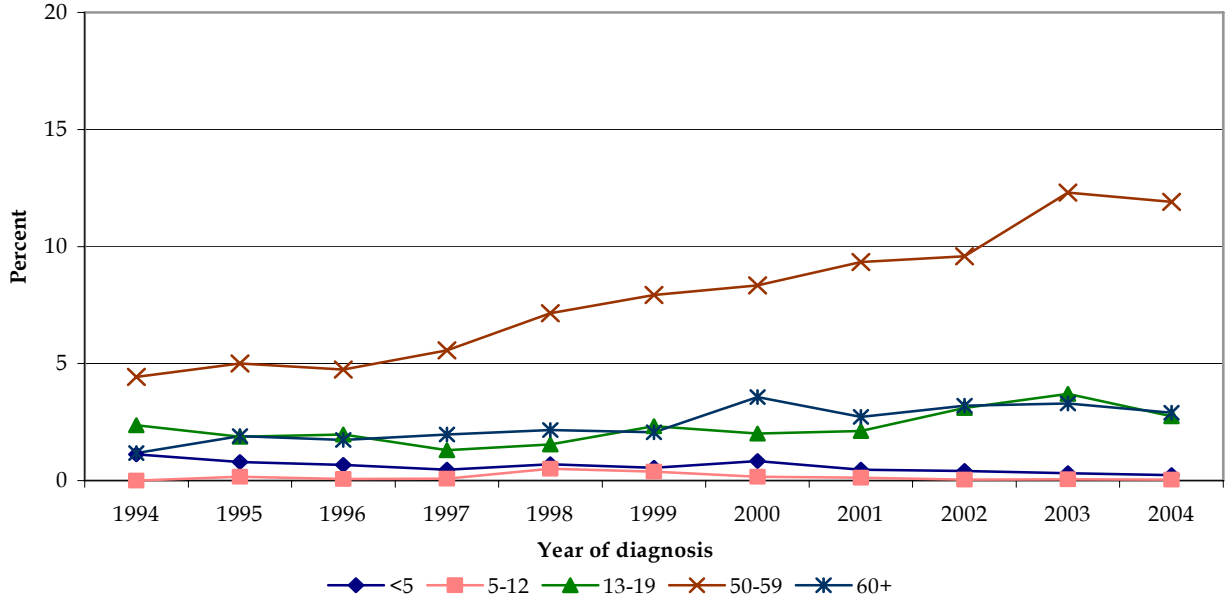
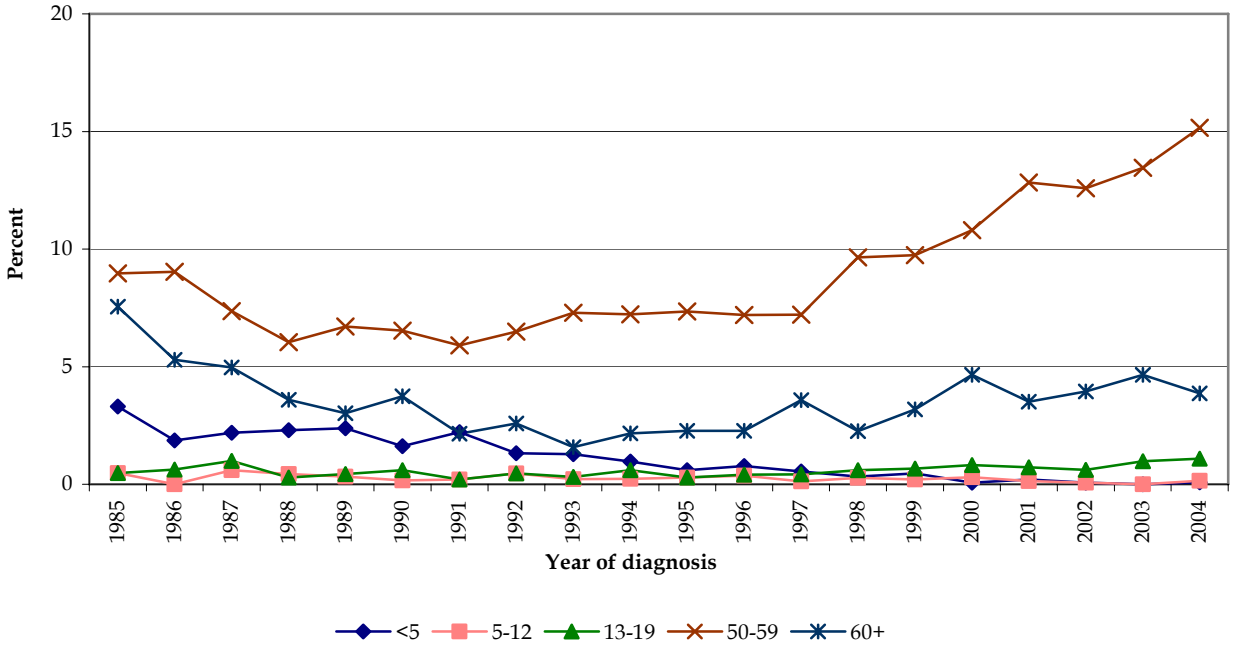


Figure 5.8: Proportion of AIDS Cases by Year of Diagnosis and Younger and Older Age Groups



Geographic Distribution

The percentages of HIV and AIDS cases by jurisdiction with the highest incidence counts by year of diagnosis are presented in Tables 5.7 and 5.8, and are illustrated in Figures 5.9 and 5.10. Baltimore City, accounting for half of all newly diagnosed HIV (50-57%) cases since 1994 and AIDS (46-57%) cases since 1988, consistently has the highest percentages of HIV and AIDS cases in Maryland. Prince George's County, with 10-18% of newly diagnosed HIV cases since 1994, and 14-26% of new AIDS cases since 1985, has the second highest percentages.

HIV cases diagnosed in correctional facilities have decreased from 18% in 1994 to 4% in 2004 and AIDS cases diagnosed in correctional facilities have increased over time, from 0.5% in 1985 to 9% in 2000 to 6% in 2004.

Table 5.7: Geographic Distribution of HIV Cases by Year of Diagnosis

YEAR	Anne Arundel County		Baltimore City		Baltimore County		Montgomery County		Prince George's County		Corrections		Rest of Maryland	
1994	85	2.7%	1,552	49.5%	168	5.4%	177	5.6%	341	10.9%	568	18.1%	245	7.8%
1995	52	2.1%	1,439	57.1%	111	4.4%	121	4.8%	265	10.5%	347	13.8%	185	7.3%
1996	66	2.4%	1,431	53.0%	167	6.2%	151	5.6%	308	11.4%	368	13.6%	208	7.8%
1997	50	2.1%	1,224	51.2%	148	6.2%	122	5.1%	247	10.4%	419	17.5%	179	7.5%
1998	56	2.2%	1,440	55.6%	153	5.9%	145	5.6%	299	11.5%	293	11.3%	204	7.9%
1999	53	2.2%	1,357	57.2%	142	6.0%	128	5.4%	268	11.3%	208	8.8%	216	9.1%
2000	64	2.7%	1,203	50.5%	198	8.3%	160	6.7%	327	13.7%	218	9.1%	215	9.0%
2001	95	4.0%	1,261	53.5%	174	7.4%	139	5.9%	258	11.0%	188	8.0%	241	10.2%
2002	60	2.7%	1,117	51.0%	175	8.0%	161	7.3%	374	17.1%	143	6.5%	162	7.4%
2003	54	2.8%	982	50.6%	159	8.2%	166	8.5%	315	16.3%	125	6.4%	140	7.2%
2004	63	3.0%	1,086	50.6%	145	6.8%	203	9.5%	380	17.7%	84	3.9%	183	8.5%

Table 5.8: Geographic Distribution of AIDS Cases by Year of Diagnosis

YEAR	Anne Arundel County		Baltimore City		Baltimore County		Montgomery County		Prince George's County		Corrections		Rest of Maryland	
1985	12	5.7%	71	33.5%	16	7.6%	34	16.0%	55	25.9%	1	0.5%	23	10.8%
1986	15	4.7%	135	42.2%	22	6.9%	55	17.2%	61	19.1%	2	0.6%	30	9.3%
1987	15	3.0%	205	40.7%	35	7.0%	81	16.1%	110	21.9%	8	1.6%	49	9.7%
1988	28	4.0%	343	49.4%	45	6.5%	91	13.1%	116	16.7%	8	1.1%	64	9.2%
1989	27	2.9%	441	47.7%	59	6.4%	117	12.7%	152	16.4%	33	3.6%	96	10.3%
1990	42	3.6%	640	54.3%	70	5.9%	100	8.5%	194	16.5%	49	4.2%	83	7.1%
1991	44	3.0%	812	54.5%	104	7.0%	130	8.7%	237	15.8%	44	3.0%	120	8.0%
1992	60	3.0%	1,121	56.8%	130	6.6%	135	6.8%	305	15.5%	77	3.9%	145	7.4%
1993	78	3.4%	1,286	56.5%	151	6.6%	142	6.2%	326	14.3%	121	5.3%	174	7.7%
1994	56	2.6%	1,179	54.3%	115	5.3%	174	8.0%	328	15.1%	131	6.0%	190	8.7%
1995	68	3.2%	1,143	53.1%	142	6.6%	174	8.1%	308	14.3%	149	6.9%	167	7.8%
1996	61	3.2%	1,075	55.6%	115	6.0%	126	6.5%	292	15.1%	113	5.8%	151	7.8%
1997	41	2.5%	940	57.0%	110	6.7%	95	5.8%	246	14.9%	100	6.0%	117	7.1%
1998	51	3.4%	831	55.3%	90	6.0%	97	6.5%	211	14.0%	91	6.0%	132	8.8%
1999	45	3.0%	821	54.4%	118	7.8%	103	6.8%	225	14.9%	87	5.8%	110	7.3%
2000	45	3.3%	682	50.4%	90	6.7%	101	7.5%	215	15.9%	117	8.7%	102	7.5%
2001	49	3.2%	792	52.4%	112	7.4%	107	7.1%	233	15.4%	97	6.4%	122	8.1%
2002	43	2.9%	720	49.0%	137	9.3%	127	8.6%	242	16.5%	97	6.6%	104	7.1%
2003	48	3.2%	709	46.5%	107	7.0%	126	8.3%	290	19.0%	112	7.4%	132	8.6%
2004	50	3.9%	598	46.3%	98	7.6%	131	10.1%	232	17.9%	83	6.4%	101	7.8%

Figure 5.9: Proportion of HIV Cases by Year of Diagnosis and Geography

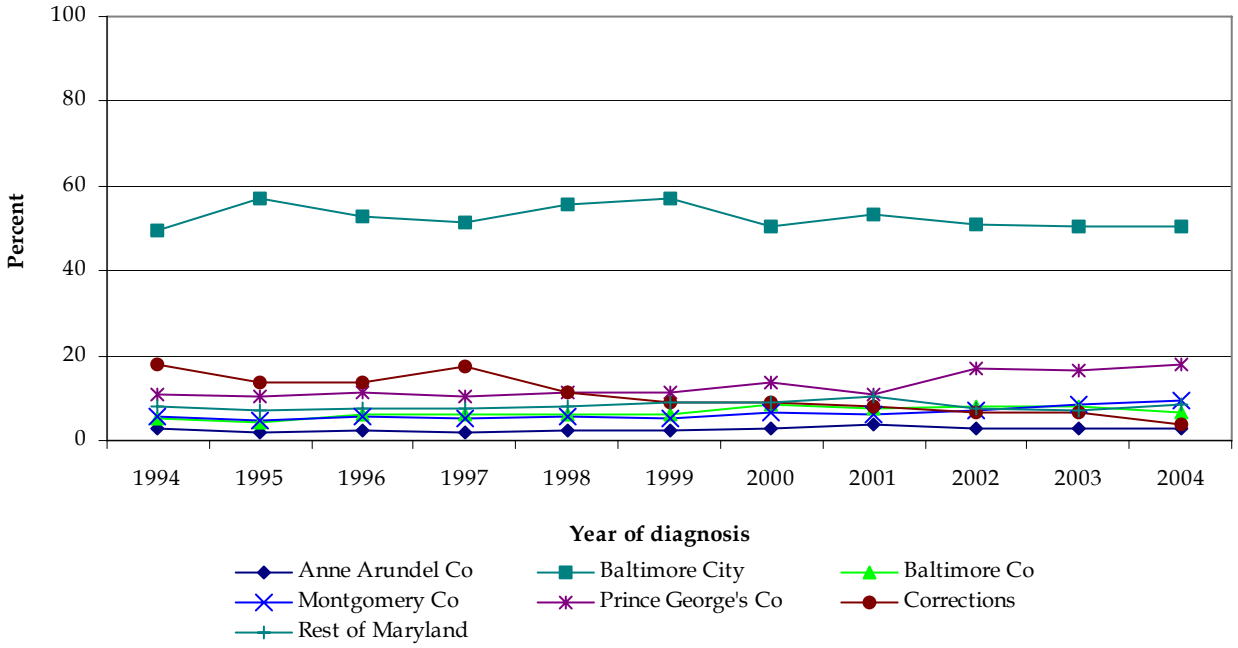
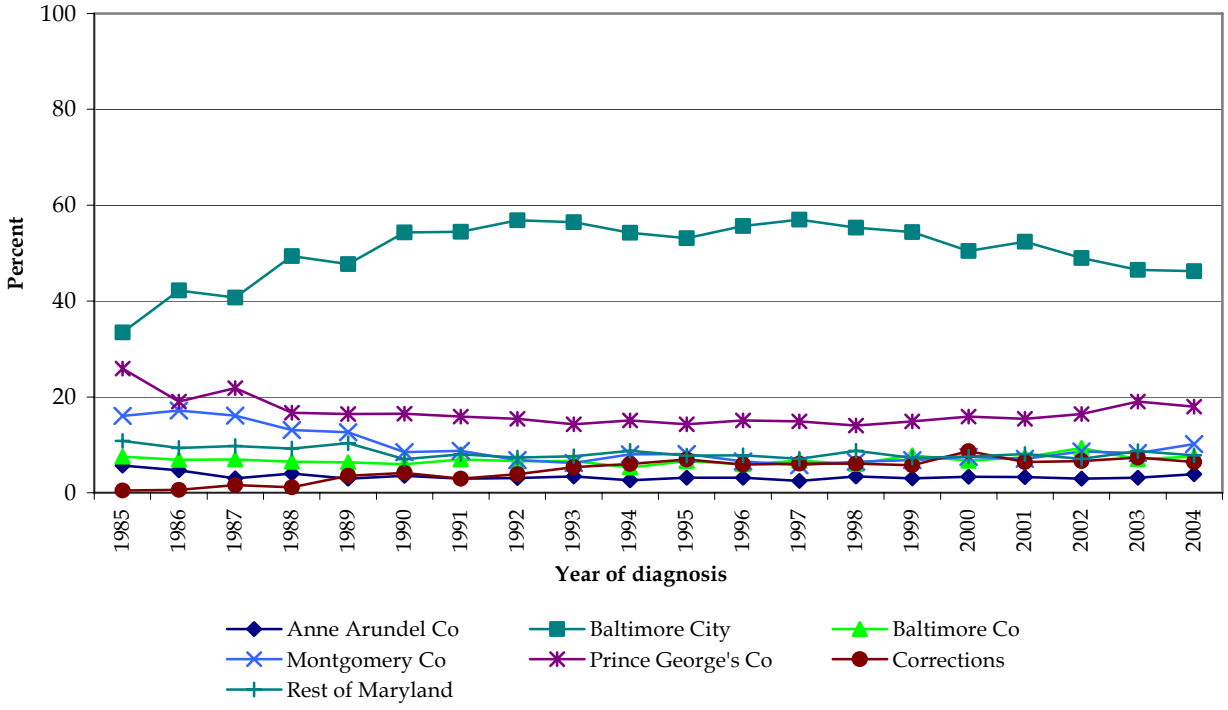


Figure 5.10: Proportion of AIDS Cases by Year of Diagnosis and Geography



Exposure Category

The percentages of HIV and AIDS cases by reported exposure category for each year of diagnosis are presented in Tables 5.9 and 5.10. The top four HIV and AIDS exposure category trends are illustrated in Figures 5.11 and 5.12.

In 2002, heterosexual contact surpassed injection drug use (IDU) as the most common mode of HIV exposure among newly diagnosed HIV cases.

Since 1991, IDU has been the most common mode of exposure among newly diagnosed AIDS cases. The percentage of AIDS cases that have resulted from heterosexual transmission with a person at risk for HIV surpassed MSM in 1997, and has steadily increased to within 5 percentage points of IDU in 2004.

Table 5.9: Exposure Distribution* of HIV Cases by Year of Diagnosis

YEAR	MSM		IDU		MSM/ IDU		Hemo/ Transf.		HetSexPR		HetSexPI		Ped.		Other	
1994	273	14.9%	1,081	58.9%	87	4.7%	12	0.7%	337	18.4%	10	0.5%	35	1.9%	0	0.0%
1995	212	13.2%	903	56.3%	87	5.4%	9	0.6%	302	18.8%	64	4.0%	24	1.5%	3	0.2%
1996	199	13.1%	807	53.3%	74	4.9%	9	0.6%	325	21.5%	80	5.3%	20	1.3%	0	0.0%
1997	149	11.0%	742	54.6%	51	3.8%	1	0.1%	297	21.9%	103	7.5%	14	1.0%	1	0.1%
1998	205	12.8%	808	50.6%	54	3.4%	9	0.6%	359	22.5%	128	8.0%	30	1.9%	3	0.2%
1999	203	14.2%	641	44.8%	39	2.7%	6	0.4%	371	26.0%	144	10.1%	21	1.5%	4	0.3%
2000	182	14.3%	557	43.8%	51	4.0%	5	0.4%	361	28.3%	89	7.0%	24	1.9%	4	0.3%
2001	170	14.1%	506	41.9%	41	3.4%	1	0.1%	410	33.9%	65	5.4%	14	1.1%	1	0.1%
2002	177	17.0%	373	35.9%	26	2.5%	1	0.1%	394	37.9%	55	5.3%	11	1.1%	3	0.2%
2003	153	17.2%	297	33.5%	16	1.8%	1	0.1%	344	38.8%	69	7.8%	7	0.8%	0	0.0%
2004	129	19.3%	197	29.3%	9	1.4%	3	0.4%	263	39.2%	63	9.4%	7	1.0%	0	0.0%

*RNS and missing risk are not included in the table or in the percent calculations.

Table 5.10: Exposure Distribution* of AIDS Cases by Year of Diagnosis

YEAR	MSM		IDU		MSM/ IDU		Hemo/ Transf.		HetSexPR		Ped.		Other	
1985	127	62.3%	29	14.2%	12	5.9%	23	11.3%	5	2.5%	8	3.8%	0	0.0%
1986	203	64.9%	49	15.7%	17	5.4%	21	6.7%	17	5.4%	6	1.9%	0	0.0%
1987	289	59.0%	109	22.2%	30	6.1%	29	5.9%	19	3.9%	14	2.9%	0	0.0%
1988	364	54.1%	172	25.6%	47	7.0%	35	5.2%	36	5.3%	19	2.8%	0	0.0%
1989	420	47.0%	301	33.7%	62	6.9%	38	4.2%	48	5.4%	25	2.8%	0	0.0%
1990	465	40.5%	460	40.1%	81	7.0%	34	3.0%	87	7.6%	21	1.8%	0	0.0%
1991	527	36.7%	615	42.7%	72	5.0%	40	2.8%	147	10.2%	36	2.5%	1	0.1%
1992	610	32.3%	881	46.6%	119	6.3%	42	2.2%	202	10.7%	36	1.9%	0	0.0%
1993	665	30.2%	1,062	48.2%	128	5.8%	37	1.7%	276	12.5%	35	1.6%	0	0.0%
1994	595	28.2%	1,044	49.4%	95	4.5%	28	1.3%	332	15.2%	29	1.4%	0	0.0%
1995	541	26.1%	1,024	49.4%	106	5.1%	24	1.2%	356	17.2%	20	1.0%	0	0.0%
1996	420	22.8%	946	51.5%	75	4.1%	19	1.0%	354	19.3%	23	1.3%	0	0.0%
1997	303	19.7%	816	53.1%	58	3.8%	7	0.5%	341	22.2%	12	0.7%	0	0.0%
1998	261	18.8%	753	54.2%	55	4.0%	8	0.6%	302	21.7%	9	0.7%	0	0.0%
1999	259	18.8%	714	51.9%	43	3.1%	8	0.6%	342	24.8%	11	0.8%	0	0.0%
2000	232	19.1%	622	51.3%	36	3.0%	7	0.6%	311	25.6%	5	0.4%	0	0.0%
2001	247	17.7%	705	50.7%	41	3.0%	2	0.1%	388	27.9%	9	0.6%	0	0.0%
2002	236	17.4%	632	46.4%	30	2.2%	4	0.3%	455	33.4%	4	0.3%	0	0.0%
2003	262	18.7%	600	42.9%	34	2.4%	3	0.2%	499	35.7%	2	0.1%	0	0.0%
2004	209	19.2%	446	41.0%	20	1.8%	5	0.5%	402	36.9%	7	0.6%	0	0.0%

*RNS and missing risk are not included in the table or in the percent calculations.

Figure 5.11: Proportion of HIV Cases by Year of Diagnosis and Mode of Exposure

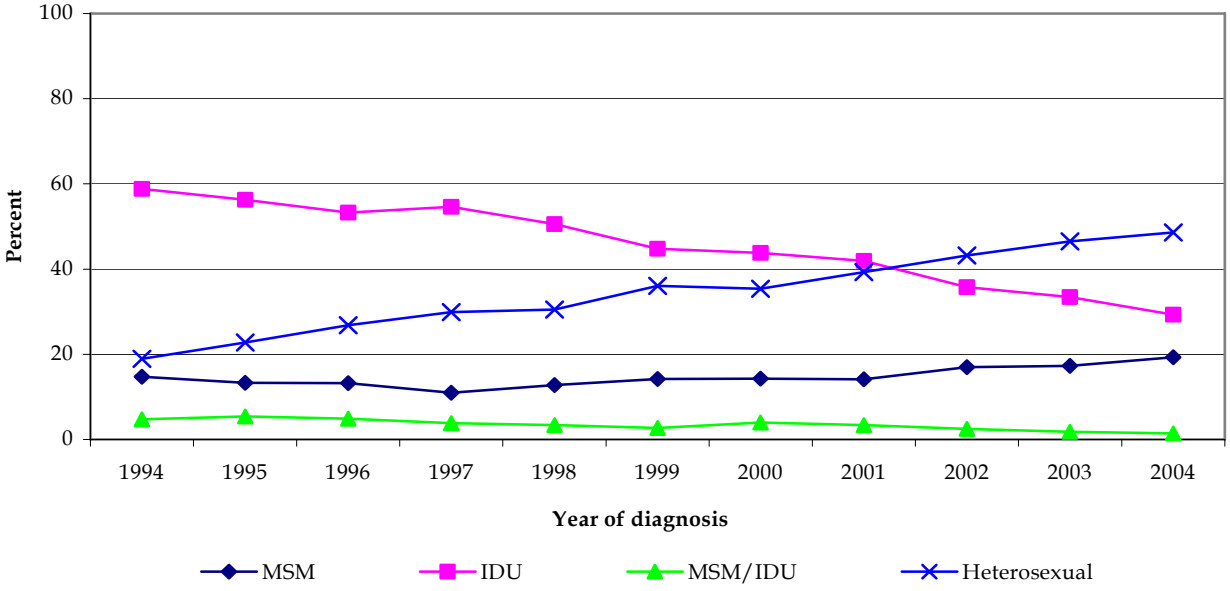
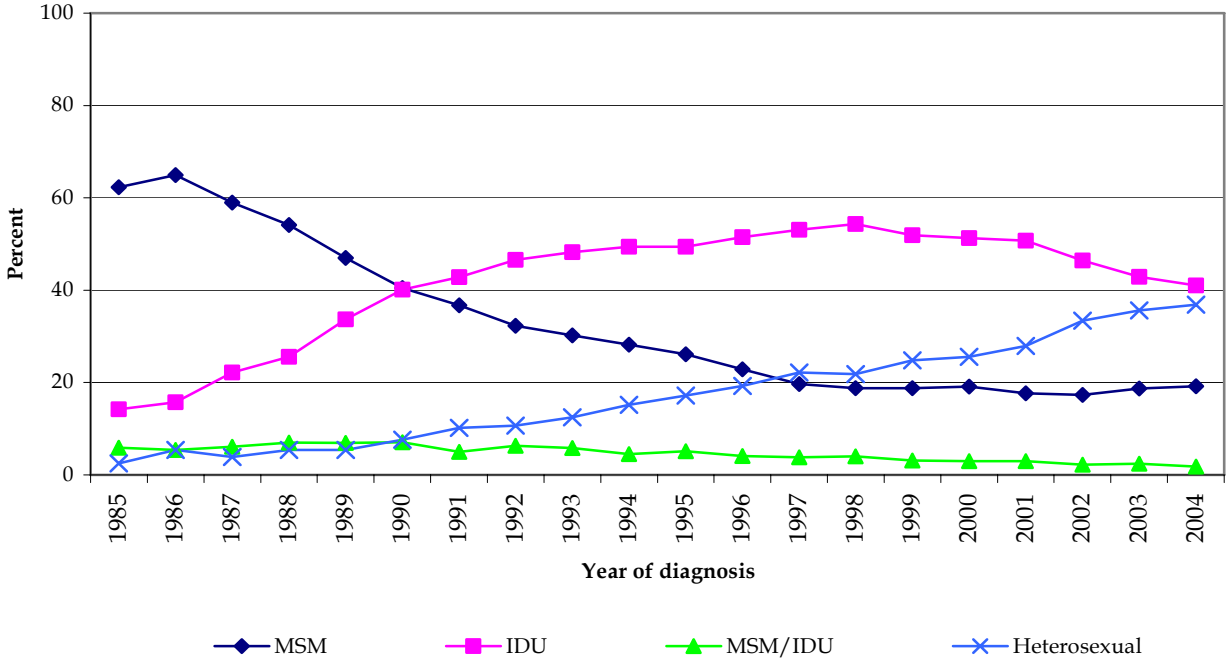


Figure 5.12: Proportion of AIDS Cases by Year of Diagnosis and Mode of Exposure



HIV Incidence Rates

Tables 5.11 and 5.12 present HIV incidence rates per 100,000 population for males and females. The HIV incidence rates for both male and female African-Americans, though decreasing over time, are substantially higher than the HIV incidence rates for other racial and ethnic groups.

Table 5.11: Male HIV Incidence Rates per 100,000 Population* by Race/Ethnicity and Year of Diagnosis

YEAR	White	African-American	Hispanic	Other	Total**
1994	16.6	255.9	34.6	18.6	85.5
1995	13.3	209.8	20.6	9.5	68.6
1996	12.7	211.2	30.7	19.4	69.9
1997	11.2	180.8	16.5	8.4	62.0
1998	13.4	178.1	10.1	10.0	64.1
1999	11.1	162.9	21.0	14.3	59.7
2000	10.0	133.6	18.4	16.1	57.6
2001	10.6	140.1	17.6	17.8	56.4
2002	10.2	120.8	18.4	11.7	52.6
2003	8.6	109.7	15.4	19.6	47.0
2004	10.7	110.0	13.4	12.3	50.0

*Intercensal population estimates are used to calculate rates for each year.
**Persons with missing gender are excluded; persons with missing race are included in total rates.

Figure 5.13: HIV Incidence Rates per 100,000 Population by Year of Diagnosis and Race/Ethnicity for Males

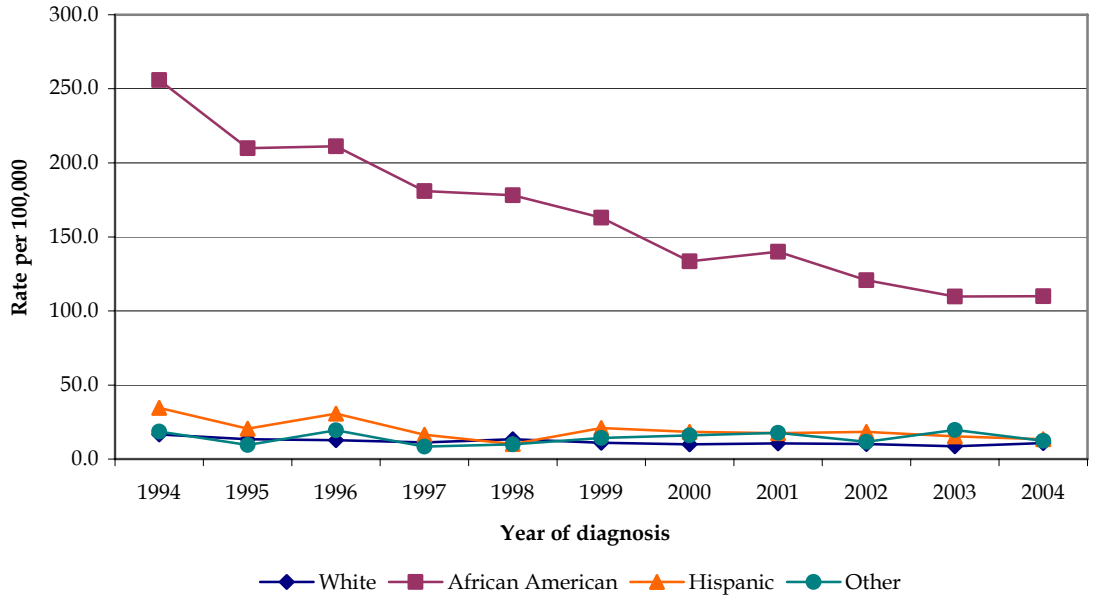
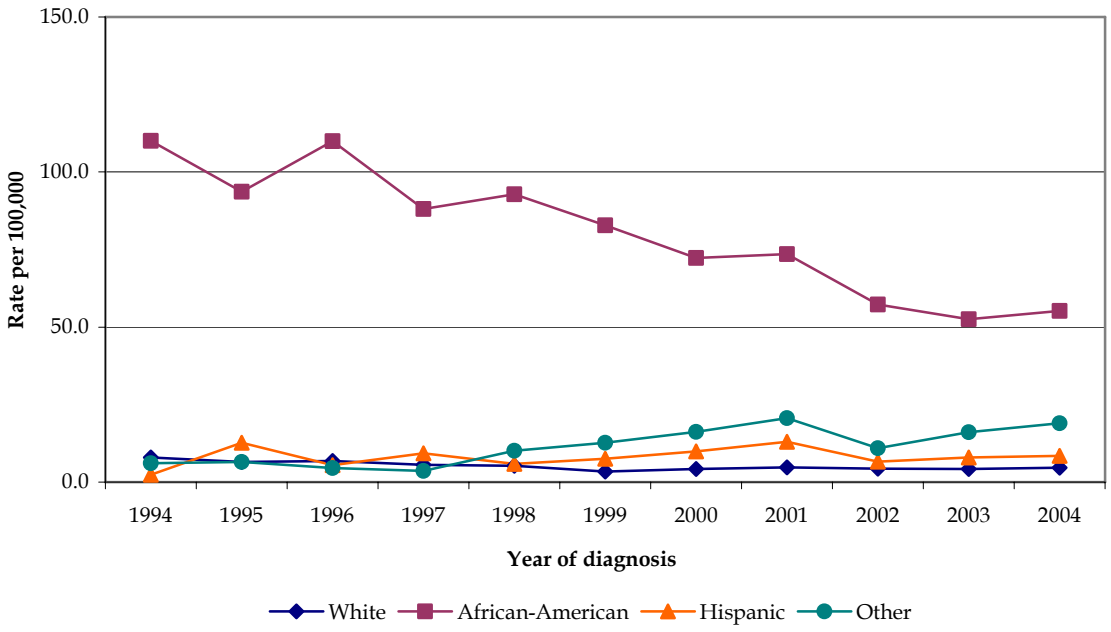


Table 5.12: Female HIV Incidence Rates per 100,000 Population* by Race/Ethnicity and Year of Diagnosis

YEAR	White	African-American	Hispanic	Other	Total**
1994	8.0	110.0	2.4	6.1	40.5
1995	6.5	93.6	12.7	6.5	31.8
1996	6.8	109.9	5.5	4.5	36.8
1997	5.6	88.1	9.3	3.6	31.4
1998	5.3	92.8	5.9	10.1	36.0
1999	3.4	82.8	7.5	12.7	31.3
2000	4.2	72.3	9.9	16.2	32.9
2001	4.8	73.5	13.0	20.6	32.2
2002	4.3	57.3	6.6	10.9	29.1
2003	4.2	52.5	8.0	16.1	24.6
2004	4.6	55.2	8.5	19.0	28.3

*Intercensal population estimates are used to calculate rates for each year.
**Persons with missing gender are excluded; persons with missing race are included in total rates.

Figure 5.14: HIV Incidence Rates per 100,000 Population by Year of Diagnosis and Race/Ethnicity for Females



AIDS Incidence Rates

Tables 5.13 and 5.14 present AIDS incidence rates per 100,000 population for males and females. There was a peak in African-American male cases (218.0 cases per 100,000) in 1993 and a peak in African-American female cases in 1995 (72.2 cases per 100,000).

Table 5.13: Male AIDS Incidence Rates per 100,000 Population* by Race/Ethnicity and Year of Diagnosis.

YEAR	White	African-American	Hispanic	Other	Total**
1985	5.9	17.7	14.5	0.0	8.7
1986	8.3	27.6	19.5	3.2	13.0
1987	13.1	41.7	16.5	0.0	19.5
1988	14.3	66.0	22.5	0.0	26.3
1989	16.0	90.4	31.2	7.0	33.9
1990	17.7	113.3	26.3	3.9	40.4
1991	19.0	143.3	41.3	4.8	49.4
1992	22.7	197.3	33.0	4.4	65.3
1993	24.8	218.0	41.9	10.0	72.9
1994	22.3	200.8	36.9	4.6	67.0
1995	21.4	189.2	36.9	3.5	63.9
1996	15.3	171.4	20.5	4.9	55.2
1997	10.5	141.6	22.3	2.3	44.7
1998	10.1	130.3	21.2	0.0	41.6
1999	10.2	122.5	18.4	2.7	40.0
2000	7.6	108.3	23.4	6.4	35.2
2001	10.3	116.0	19.2	3.1	38.8
2002	9.1	106.3	17.6	5.3	35.8
2003	9.0	110.2	25.7	5.6	37.5
2004	7.9	89.6	21.9	4.3	31.1

*Intercensal population estimates are used to calculate rates for each year.
**Persons with missing gender are excluded; persons with missing race are included in total rates.

Figure 5.15: AIDS Incidence Rates per 100,000 Population by Year of Diagnosis and Race/Ethnicity for Males

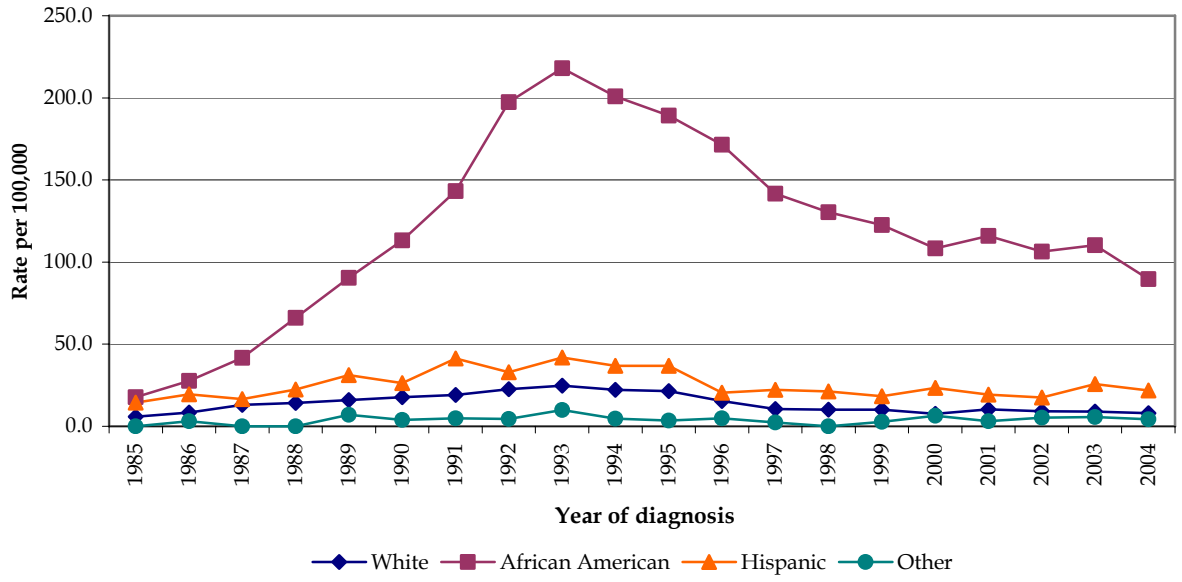
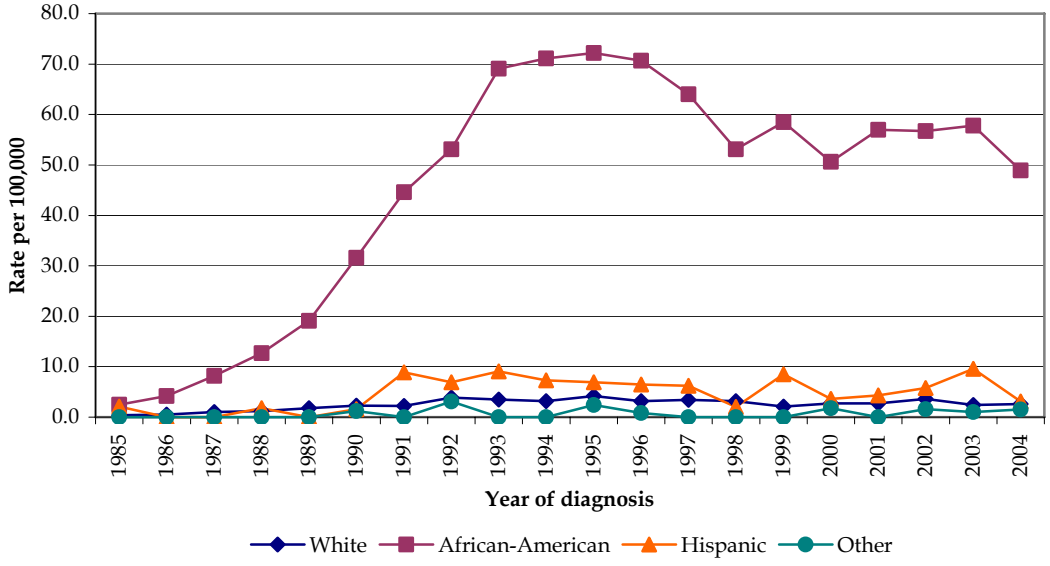


Table 5.14: Female AIDS Incidence Rates per 100,000 Population* by Race/Ethnicity and Year of Diagnosis

YEAR	White	African-American	Hispanic	Other	Total**
1985	0.4	2.5	2.1	0.0	0.9
1986	0.5	4.2	0.0	0.0	1.4
1987	1.0	8.2	0.0	0.0	2.7
1988	1.2	12.7	1.8	0.0	4.1
1989	1.8	19.1	0.0	0.0	6.0
1990	2.3	31.6	1.6	1.2	9.7
1991	2.2	44.6	8.9	0.0	13.3
1992	3.9	53.1	6.9	3.1	16.8
1993	3.5	69.1	9.1	0.0	20.8
1994	3.2	71.1	7.3	0.0	21.4
1995	4.2	72.2	6.9	2.4	22.6
1996	3.2	70.7	6.5	0.8	21.7
1997	3.4	64.0	6.2	0.0	20.1
1998	3.2	53.1	2.0	0.0	16.9
1999	2.1	58.5	8.5	0.0	18.2
2000	2.7	50.6	3.6	1.8	16.4
2001	2.7	57.0	4.3	0.0	18.3
2002	3.6	56.7	5.8	1.6	19.1
2003	2.4	57.8	9.6	1.0	19.0
2004	2.6	48.9	3.1	1.5	16.3

*Intercensal population estimates are used to calculate rates for each year.
**Persons with missing gender are excluded; persons with missing race are included in total rates.

Figure 5.16: AIDS Incidence Rates per 100,000 Population by Year of Diagnosis and Race/Ethnicity for Females

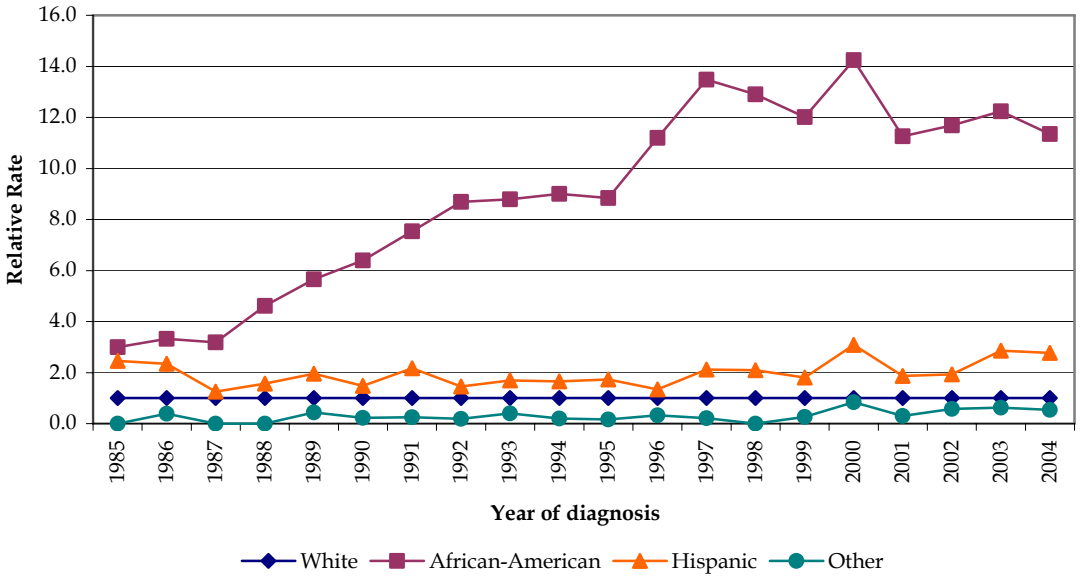


Relative AIDS Incidence Rates

Relative rates are used to compare incidence rates between sub-populations. For example, relative male incidence rates can be calculated by choosing one subpopulation of males as a reference group (for this calculation white males were used, but any group can be used as the referent). For each year, the rates for African-American males, Hispanic males, and others are divided by the rate for white males in order to obtain the relative incidence rate of each race/ethnicity for males.

The relative rate of African-American male AIDS incidence compared to the white male AIDS incidence rate has been increasing since 1987. African-American males currently have an AIDS incidence rate 11.3 times greater than white males. The Hispanic male relative rates have remained steady at around 1-3 times greater than white males, and the relative rates for other races/ethnic groups have stayed consistently below the AIDS incidence rate of white males.

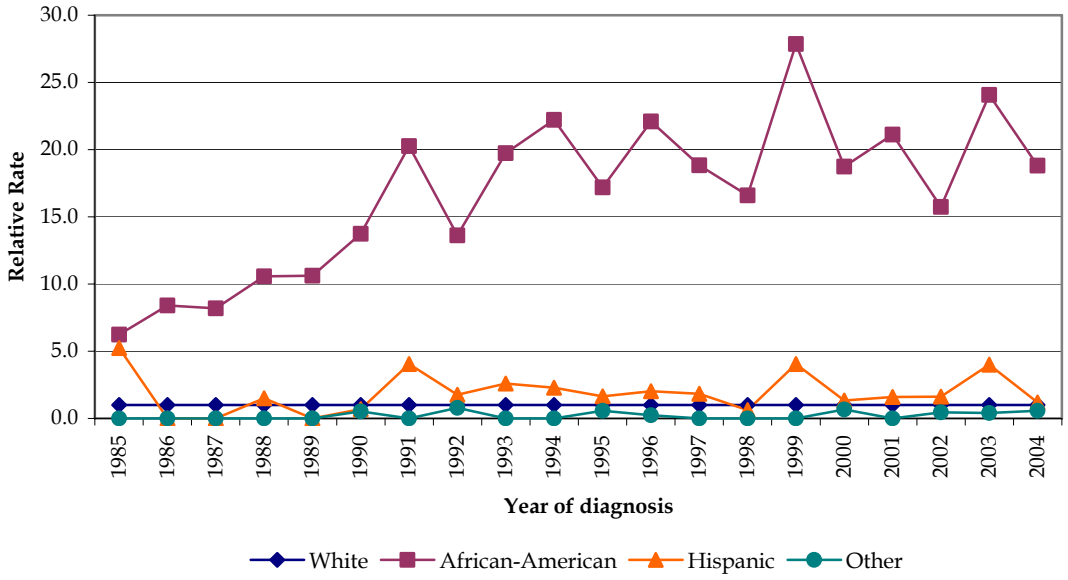
Figure 5.17: Relative AIDS Incidence Rates per 100,000 Population by Year of Diagnosis and Race/Ethnicity for Males*



*Reference group: white males

African-American female relative AIDS incidence rates have increased over time when compared to white female AIDS incidence rates. Currently, the AIDS incidence rate for African American females is 18.8 times greater than the AIDS incidence rate for white females. Recent relative incident rates for Hispanic females vary from 1-5 times higher than white females, and the rates for other race/ethnicity females are consistently below those of white females.

Figure 5.18: Relative AIDS Incidence Rates per 100,000 Population by Year of Diagnosis and Race/Ethnicity for Females*



*Reference group: white females

CHAPTER 6: NATIONAL COMPARISONS

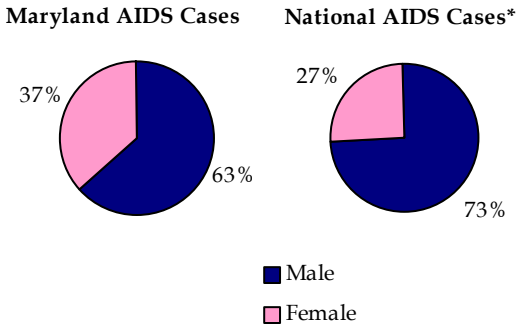
Maryland versus National AIDS Cases

Maryland AIDS cases differ from the national cases in terms of gender, race/ethnicity and mode of exposure. HIV comparisons are not investigated because national HIV surveillance information is incomplete at this time.

Gender

Female cases comprised a higher percentage of all adult/adolescent cases in Maryland than national cases in 2004 (Maryland 37% female versus national 27% female).

Figure 6.1: AIDS Case Reports in 2004 by Gender

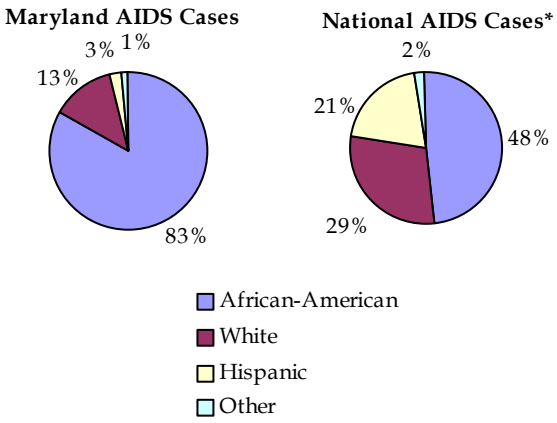


Maryland data reported through 6/30/05.
*Source: CDC, 2004.

Race/Ethnicity

Compared to national AIDS cases, a higher percentage of Maryland cases are African-American (Maryland 83% versus national 48%), while a much lower percentage are Hispanic (Maryland 3% versus national 21%), and white (Maryland 13% versus national 29%). These racial differences are due in part to the differences between the Maryland population and the U.S. national population. Maryland has a greater percentage of African-Americans than the national percentage (28% versus 12%, respectively), and a smaller percentage of Hispanics than the national percentage (4% versus 13%, respectively).

Figure 6.2: AIDS Case Reports in 2004 by Race/Ethnicity

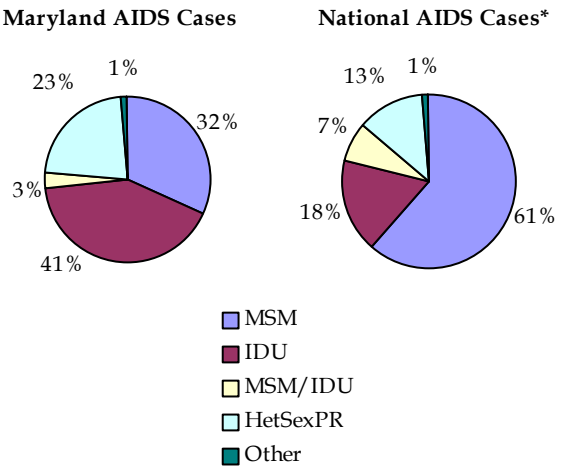


Maryland data reported through 6/30/05.
*Source: CDC, 2004.

Exposure Category

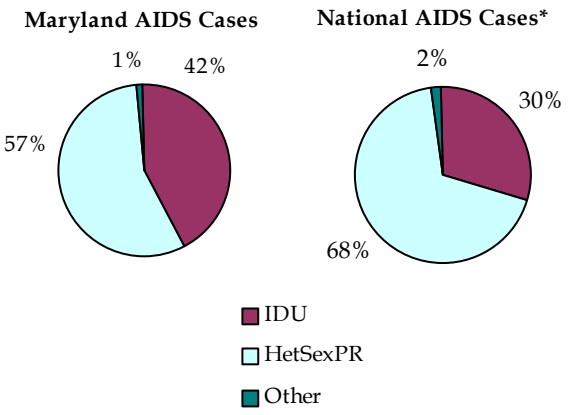
Maryland male AIDS cases are more likely to report injection drug use (Maryland 41% versus national 18%), and less likely to report that they are MSM than national cases (Maryland 32% versus national 61%). Maryland female AIDS cases are more likely to report injection drug use (Maryland 42% versus national 30%) and less likely to report heterosexual contact as their mode of exposure (Maryland 57% versus national 68%). Cases with risk not specified (RNS) are excluded from these comparisons.

Figure 6.3: Male AIDS Case Reports in 2004 by Mode of Exposure



Maryland data reported through 6/30/05.
*Source: CDC, 2004.

Figure 6.4: Female AIDS Case Reports in 2004 by Mode of Exposure



Maryland data reported through 6/30/05.
*Source: CDC, 2004.

Maryland AIDS Rates and Other Regions

In 2004, Maryland ranked fourth highest in the United States at 26.1 AIDS cases reported per 100,000 population. While Maryland ranked nineteenth among the 50 states and the District of Columbia in total population, it ranked ninth in cumulative number of AIDS cases and seventh in cumulative pediatric cases. Maryland accounted for three percent of the total 888,795 AIDS cases reported in the United States through December 2004. Maryland includes the entire Baltimore-Towson metropolitan area and parts of the Washington, DC-VA-MD-WV metropolitan area. In 2004, these two areas had the 5th and 4th highest AIDS case report rates of metropolitan areas with 500,000 or more population (32.8 and 35.0 per 100,000, respectively) within the United States. Tables 6.1 and 6.2 present annual AIDS report rates, number of annual AIDS cases, and cumulative AIDS cases for the top ten states and top ten metropolitan areas nationwide. Data concerning AIDS report rates for Maryland, neighboring states, and metropolitan areas were obtained from the CDC HIV/AIDS Surveillance Report, 2004. In 2004, the CDC used new federal definitions for metropolitan areas. The state and metropolitan figures are cases reported during 2004, not cases diagnosed during 2004 (incidence).

In Table 6.1, Washington, D.C. is ranked the highest at 179.2 per 100,000 population when compared to other states. This ranking is extremely high when compared to other states, (the next highest was New York at 39.7 per 100,000 population) because Washington, D.C. is a densely populated urban area and the HIV/AIDS epidemic within the U.S. is generally concentrated in cities. Table 6.2 indicates that when Washington, D.C. was measured as a metropolitan area rather than a state, it was ranked 4th in the country.

Table 6.1: Annual AIDS Case Report Rates per 100,000 Population, Number of Annual AIDS Cases, and Cumulative AIDS Cases for Top Ten U.S. States Ranked by Rate, 2004*

STATE	Rate	Cases**	Cumulative Cases
1) District of Columbia***	179.2	992	16,259
2) New York	39.7	7,641	166,814
3) Florida	33.5	5,822	96,712
4) Maryland	*26.1*	*1,451*	*27,550*
5) Louisiana	22.4	1,010	16,066
6) New Jersey	21.2	1,848	47,224
7) Delaware	18.9	157	3,302
8) Connecticut	18.4	643	13,890
9) South Carolina	18.1	759	12,089
10) Mississippi	16.5	479	6,032
United States******	14.9	43,653	888,795

* Centers for Disease Control and Prevention (CDC). 2004. HIV/AIDS Surveillance Report, Year-End Edition; 16.

** Data are based on AIDS cases reported to the CDC January 2004 – December 2004.

*** Case report rates for Washington, D.C. are based on only the District of Columbia for the state rate and on the entire metropolitan region (including parts of Maryland, Virginia, and West Virginia) for the metropolitan area rate.

**** United States rates and totals exclude U.S. territories.

Table 6.2: Annual AIDS Case Report Rates per 100,000 Population, Number of Annual AIDS Cases, and Cumulative AIDS Cases for Top Ten U.S. Metropolitan Areas Ranked by Rate, 2004*

METROPOLITAN AREA	Rate	Cases**	Cumulative Cases
1) Miami, FL	53.8	2,882	52,526
2) New York, NY-NJ-PA	41.9	7,837	187,424
3) Baton Rouge, LA	35.0	255	3,311
4) Washington, DC-VA-MD-WV***	35.0	1,797	28,758
5) Baltimore-Towson, MD	*32.8*	*866*	*18,568*
6) New Orleans-Metairie-Kenner, LA	31.9	421	8,265
7) Poughkeepsie-Newburgh-Middletown, NY	31.3	208	2,922
8) Orlando, FL	31.2	581	7,781
9) Jackson, MS	30.9	160	2,196
10) Jacksonville, FL	29.9	366	5,535

* Centers for Disease Control and Prevention (CDC). 2004. HIV/AIDS Surveillance Report, Year-End Edition; 16.

** Data are based on AIDS cases reported to the CDC January 2004 – December 2004.

*** Case report rates for Washington, D.C. are based on only the District of Columbia for the state rate and on the entire metropolitan region (including parts of Maryland, Virginia, and West Virginia) for the metropolitan area rate.

Table 6.3 presents annual AIDS report rates, number of annual AIDS cases, and cumulative AIDS cases for Maryland and the neighboring states in 2004. Table 6.4 presents annual AIDS report rates, number of annual AIDS cases, and cumulative AIDS cases for Maryland and metropolitan areas in neighboring states in 2004.

Except for Washington, DC, Maryland's neighboring states and their metropolitan areas did not have incidence rates as high as Maryland or Baltimore-Towson. As described previously, the rate for Washington, D.C. as a state was very high, but as a metropolitan area was much lower.

Table 6.3: Annual AIDS Case Report Rates per 100,000 Population, Number of Annual AIDS Cases, and Cumulative AIDS Cases for Maryland and Neighboring States Ranked by Rate, 2004*

STATE	Rate	Cases**	Cumulative Cases
1) District of Columbia* **	179.2	992	16,259
2) Maryland	*26.1*	*1,451*	*27,550*
3) Delaware	18.9	157	3,302
4) Pennsylvania	13.1	1,629	30,526
5) Virginia	10.7	796	15,740
6) West Virginia	5.1	93	1,375

* Centers for Disease Control and Prevention (CDC). 2004. HIV/AIDS Surveillance Report, Year-End Edition; 16.
** Data are based on AIDS cases reported to the CDC January 2004 – December 2004.
*** Case report rates for Washington, D.C. are based on only the District of Columbia for the state rate and on the entire metropolitan region (including parts of Maryland, Virginia, and West Virginia) for the metropolitan area rate.

Table 6.4: Annual AIDS Case Report Rates per 100,000 Population, Number of Annual AIDS Cases, and Cumulative AIDS Cases for Baltimore-Towson and Metropolitan Areas in Neighboring States Ranked by Rate, 2004*

METROPOLITAN AREA	Rate	Cases**	Cumulative Cases
1) Washington, DC-VA-MD-WV* **	35.0	1,797	28,758
2) Baltimore-Towson, MD	*32.8*	*866*	*18,568*
3) Philadelphia, PA-NJ-DE-MD	22.6	1,312	25,997
4) Richmond, VA	15.0	173	3,163
5) Allentown-Bethlehem-Easton, PA-NJ	11.0	86	1,187
6) Harrisburg-Carlisle, PA	10.2	53	1,174
7) Virginia Beach-Norfolk-Newport News, VA-NC	9.8	161	4,456
8) Scranton-Wilkes-Barre, PA	6.9	38	494
9) Pittsburgh, PA	5.7	136	2,936

* Centers for Disease Control and Prevention (CDC). 2004. HIV/AIDS Surveillance Report, Year-End Edition; 16.
** Data are based on AIDS cases reported to the CDC January 2004 – December 2004.
*** Case report rates for Washington, D.C. are based on only the District of Columbia for the state rate and on the entire metropolitan region (including parts of Maryland, Virginia, and West Virginia) for the metropolitan area rate.

CHAPTER 7: HIV COUNSELING, TESTING AND REFERRAL

Data Source

The Maryland AIDS Administration funds local health departments to operate 51 designated HIV Counseling, Testing and Referral (CTR) sites throughout the State of Maryland. In addition to these designated sites, all local health department sexually transmitted disease (STD) programs and other health department clinics, prison health clinics, and programs run by community based organizations, totaling 382 sites, offer HIV risk assessment, counseling, testing and referral to their clients. The CTR program, funded by federal, state, and local agencies, provides health education and risk reduction counseling. This voluntary HIV antibody testing and post-test counseling is provided to any Maryland resident at no charge. Maryland law requires written informed consent prior to HIV testing at all provider sites throughout the state.

Efforts are made to target for HIV testing those individuals who practice high-risk behaviors for HIV infection. Target populations for outreach programs, counseling, testing and referral, partner counseling and referral services (PCRS), and referral for HIV treatment include: men who have sex with men (MSM); injection drug users (IDU) and other substance abusers; individuals who trade sex for money or drugs; needle-sharing or sex partners of individuals either infected with HIV or diagnosed with AIDS; individuals with multiple sex partners; patients of STD, methadone, and tuberculosis (TB) clinics; and sexually active youth.

Pre-test counseling is the first step in the counseling and testing process. During this step, the client is informed about HIV, the syndrome it causes, ways to prevent transmission, and the implications of a negative or a positive HIV antibody test. At some sites, the option of a confidential or an anonymous test is provided. Confidential testing includes the use of the Unique Identifier (UI) number on CTR report forms, which permits the identification of multiple tests for one individual. Anonymous testing does not utilize the UI. Consequently, anonymous testing data are analyzed in terms of tests, as opposed to individuals.

During post-test counseling, the client is informed of their test result (negative, positive, or indeterminate) and one-on-one HIV/AIDS counseling is reinforced in all outcomes. Additional counseling is provided to those who tested positive for HIV, including information regarding the reduction of further HIV transmission and the importance of partner notification. All health departments offer services to assist clients with partner notification. Furthermore, seropositive individuals receive referrals for medical and psychiatric follow-up, including early screening for and treatment of other STDs and TB.

Aggregate HIV Test Data

The CTR program gathers risk behavior and demographic information on all individuals seeking HIV testing during pre-test counseling. Test results, when reported, are linked to demographic and risk information. The HIV data presented previously in this report provide information on all HIV positive reports within the state. Unlike most of the data presented in this report, CTR testing data include negative HIV test results. This permits the measurement of percent positive by demographic characteristics. Testing in CTR is responsible for identifying approximately twenty percent of all HIV positive tests statewide.

Since incorporating the UI into the CTR database in February of 1995, through December of 2004, a total of 686,929 HIV tests have been recorded. Of the 686,929 tests, 589,408 (86.0%) were confidential and 97,521 (14.0%) were anonymous. In 2004, 68,891 confidential tests were done, of which 920 (1.3%) were positive; and 12,967 anonymous tests were done, of which 484 (3.7%) were positive. Numbers of aggregate tests done and test result information for the years 1995-2004 are presented in Figures 7.1 and 7.2. As Figure 7.1 indicates, the majority of HIV tests performed in Maryland are confidential. Figure 7.2 shows that anonymous testers are consistently more likely than confidential testers to be HIV positive.

Figure 7.1: Annual CTR Testing by Type of Test and Year, 1995-2004

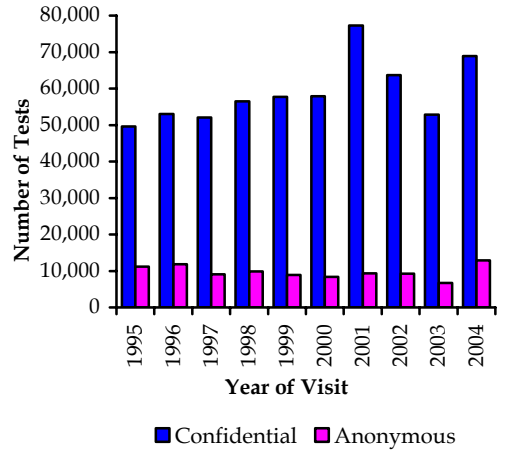
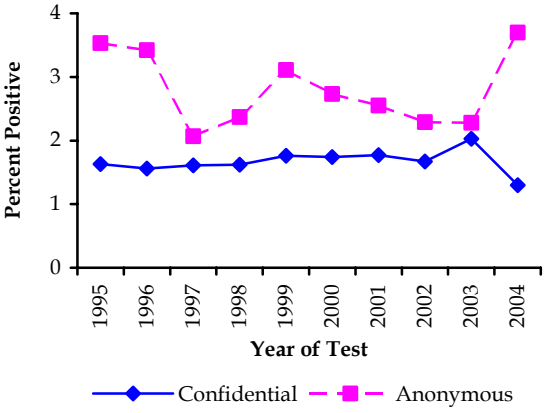


Figure 7.2: Percent of HIV Positive CTR Tests by Type of Test and Year, 1995-2004



HIV Tests with Complete UI and Test Result Data

The aggregate data for HIV tests presented in this chapter use a definition for confidential and anonymous tests that is based on the reported type of test (CTR definition), the type of test site reported (confidential and/or anonymous), the presence and completeness of the UI and HIV test results.

From 1995-2004, a total of 589,408 confidential tests were reported from CTR sites. In Maryland, it is required for UI information to be collected from individuals taking a confidential HIV test; it is not required for UI information to be gathered from individuals taking an anonymous HIV test. Of the 589,408 confidential tests, 481,552 (81.7%) had complete UI numbers and complete HIV test result information (either a negative or positive result) reported. Linking data from all records with the same UI created a person-specific database. The 481,552 HIV tests with complete UI numbers and complete HIV test information corresponded to 323,062 individuals. Approximately 240,824 (74.5%) of these individuals visited a confidential CTR site only once between 1995-2004. The remaining 82,238 (25.5%) individuals were tested two or more times during this time period. Tables 7.1 and 7.2 and Figures 7.3 to 7.8 present the confidential testing data for individuals who had complete unique identifiers and complete HIV testing results reported to the state.

Table 7.1: Distribution of the 2000 Maryland Population, 2004 CTR Confidential Tests of Individuals, Number of 2004 HIV Positive Tests, and Percent HIV Positive by Gender, Race/Ethnicity, Age and Mode of Exposure

	2000 Maryland Population***		CTR Tested		HIV Positive		% Positive
GENDER	**No.**	**%**	**No.**	**%**	**No.**	**%**	
Male	2,557,794	48.3%	24,739	48.4%	465	62.8%	1.9
Female	2,738,692	51.7%	26,403	51.6%	276	37.2%	1.0
RACE/ETHNICITY							
White	3,286,547	62.1%	13,525	26.4%	72	9.7%	0.5
African-American	1,464,735	27.6%	34,516	67.5%	642	86.6%	1.9
Hispanic	227,916	4.3%	1,946	3.8%	11	1.5%	0.6
Other	317,288	6.0%	1,155	2.3%	16	2.2%	1.4
AGE (years)							
< 5	353,393	6.7%	38	0.1%	0	0.0%	0.0
5-12	631,965	11.9%	22	0.0%	0	0.0%	0.0
13-19	507,607	9.6%	9,166	17.9%	30	4.0%	0.3
20-29	656,999	12.4%	20,678	40.4%	154	20.8%	0.7
30-39	870,439	16.4%	10,742	21.0%	220	29.7%	2.0
40-49	850,758	16.1%	7,693	15.1%	261	35.2%	3.4
50-59	624,289	11.8%	2,303	4.5%	66	8.9%	2.9
60 +	801,036	15.1%	500	1.0%	10	1.4%	2.0
EXPOSURE*							
MSM	-		1,316	2.9%	87	12.9%	6.6
IDU	-		4,448	9.7%	213	31.5%	4.8
MSM/IDU	-		177	0.4%	9	1.3%	5.1
Hemophiliac/Transf.	-		94	0.2%	1	0.1%	1.1
Heterosexual PR	-		21,667	47.1%	215	31.8%	1.0
**Heterosexual PI	-		9,945	21.6%	95	14.1%	1.0
Pediatric	-		4	0.0%	0	0.0%	0.0
Other	-		8,330	18.1%	56	8.3%	0.7
Risk not Specified	-		5,161	----	65	----	1.3
TOTAL	**5,296,486**	**(100.0%)**	**51,142**	**(100.0%)**	**741**	**(100.0%)**	**1.5**

* Risk not specified and missing data are not included in distribution percentages.
MSM = Men who have sex with men.
IDU = Injection drug users.
MSM/IDU = Men who have sex with men and are injection drug users.
HetSexPR = Heterosexual contact with a partner who has or is at risk for HIV.
HetSexPI = Heterosexual contact with a partner of indeterminate risk for HIV.
** Not a CDC defined category.
*** Census 2000.

Table 7.2: Distribution of the 2000 Maryland Population, 2004 CTR Confidential Tests of Individuals, Number of 2004 HIV Positive Tests, and Percent HIV Positive by County

COUNTY	2000 Maryland Population**		CTR Tested		HIV Positive		% Positive
	No.	%	No.	%	No.	%	
Allegany	74,930	1.4%	944	1.8%	5	0.7%	0.5
Anne Arundel	489,656	9.2%	2,583	5.0%	11	1.5%	0.4
Baltimore City	651,154	12.3%	21,449	42.0%	475	64.1%	2.2
Baltimore County	754,292	14.2%	2,676	5.2%	9	1.2%	0.3
Calvert	74,563	1.4%	674	1.3%	1	0.1%	0.1
Caroline	29,772	0.6%	440	0.8%	2	0.3%	0.5
Carroll	150,897	2.9%	816	1.6%	3	0.4%	0.3
Cecil	85,951	1.6%	529	1.0%	3	0.4%	0.6
Charles	120,546	2.3%	1,104	2.2%	4	0.5%	0.4
Dorchester	30,674	0.6%	662	1.3%	5	0.7%	0.8
Frederick	195,277	3.7%	976	1.9%	5	0.7%	0.5
Garrett	29,846	0.5%	155	0.3%	0	0.0%	0.0
Harford	218,590	4.1%	1,100	2.2%	17	2.3%	1.5
Howard	247,842	4.7%	696	1.4%	3	0.4%	0.4
Kent	19,197	0.4%	389	0.8%	1	0.1%	0.3
Montgomery	873,341	16.5%	1,188	2.3%	24	3.2%	2.0
Prince George's	801,515	15.1%	5,929	11.6%	48	6.5%	0.8
Queen Anne's	40,563	0.8%	194	0.4%	2	0.3%	1.0
Saint Mary's	86,211	1.6%	338	0.7%	2	0.3%	0.6
Somerset	24,747	0.5%	297	0.6%	3	0.4%	1.0
Talbot	33,812	0.6%	318	0.6%	1	0.1%	0.3
Washington	131,923	2.5%	781	1.5%	7	1.0%	0.9
Wicomico	84,644	1.6%	1,525	3.0%	6	0.8%	0.4
Worcester	46,543	0.9%	443	0.9%	1	0.1%	0.2
Corrections	-------	-------	4,913	9.6%	103	13.9%	2.1
Missing*	-------	-------	23	-------	0	-------	0.0
TOTAL	**5,296,486**	**100.0%**	**51,142**	**100.0%**	**741**	**100.0%**	**1.5**

* CTR tests with missing county information are not included in the distribution percentages.
** Census 2000.

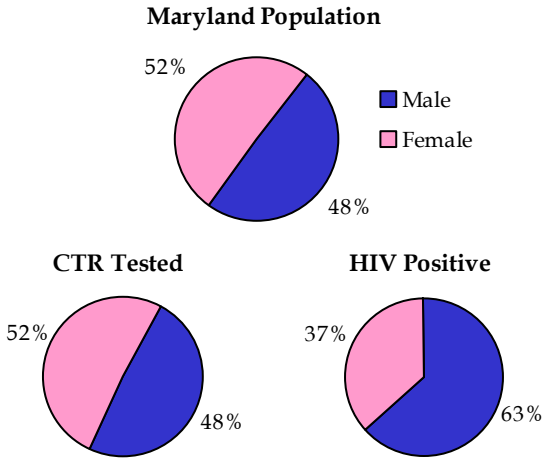
Confidential Testing - CTR 2004

Tables 7.1 and 7.2 compare demographic characteristics of the 2000 Maryland general population to the demographic and exposure characteristics of those individuals within the CTR confidential testing population who had complete UIs (no missing/invalid components) and complete HIV test results (either a positive or negative result) in 2004. Of the 51,142 individuals receiving confidential HIV tests with complete test results in 2004, 741 (1.5%) tested HIV positive at their last test.

Gender

The Maryland population is composed of a slightly higher proportion of females then males (52% female versus 48% male). Similarly, a slightly higher proportion of females than males tested for HIV in CTR in 2004 (52% female versus 48% male). Males, however, comprise a greater majority of those testing positive for HIV (63% male versus 37% female), and in 2004, males were more likely to be HIV positive than females (1.9% of males tested positive for HIV versus 1.0% of females).

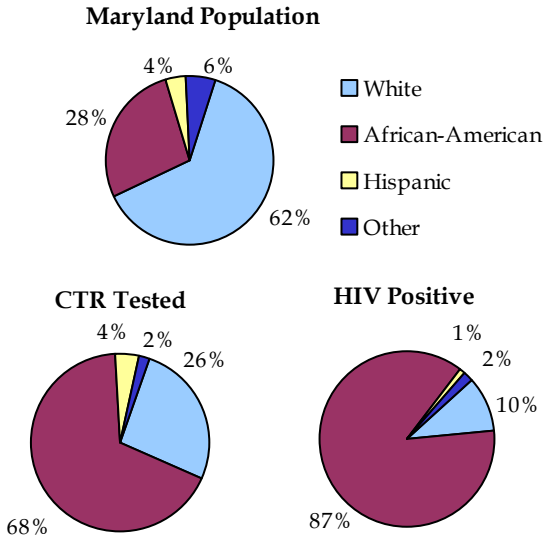
Figure 7.3: Proportion of Maryland Population and 2004 CTR Confidential Testing of Individuals by Gender



Race/Ethnicity

Figure 7.4 presents the proportion of the 2000 Maryland population and 2004 CTR confidential testing by race/ethnicity. The Maryland population is comprised of 62% whites, 28% African-Americans, 4% Hispanics and 6% Other race/ethnicity. Among confidential testers, African-Americans are the predominant racial/ethnic group CTR tested (68%), and the predominant racial/ethnic group testing HIV positive (87%).

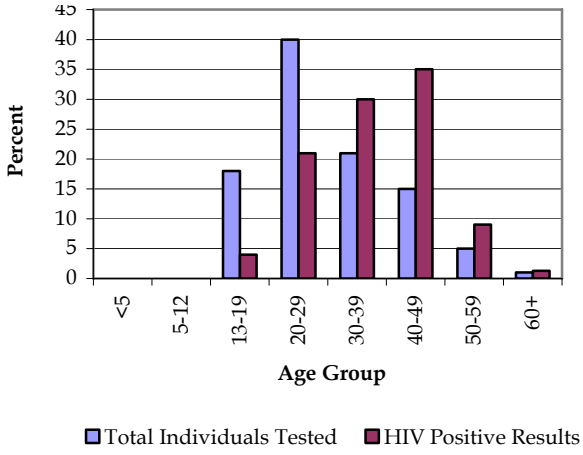
Figure 7.4: Proportion of Maryland Population and 2004 CTR Confidential Testing of Individuals by Race/Ethnicity



Age Group

The CTR program does not routinely test children under 13 years of age. Adults aged 20-29 years and 30-39 years represent the majority of people tested for HIV (40% and 21%, respectively). However, the majority of those testing positive for HIV are in the 40-49 age group (35%) and the 30-39 age group (30%). The percent HIV positive is highest in the three age groups comprising 30 through 59 year olds (between 2.0% and 3.4% positive). Figure 7.5 illustrates the percent distribution of people tested for HIV and those testing positive for HIV by age group; and it graphically portrays that while there is significant testing of younger people, most HIV positive individuals are from the middle age groups.

Figure 7.5: Proportion of 2004 CTR Confidential Testing of Individuals and HIV Positive Results by Age Group



Exposure Category

Figure 7.6 illustrates the proportion of 2004 CTR confidential testing of individuals by exposure category. Heterosexual contact was divided into two heterosexual categories: heterosexual contact with partner with or at risk for HIV (Heterosexual PR), which corresponds to the CDC's heterosexual exposure category, and heterosexual contact with partner of indeterminate risk (Heterosexual PI). The latter category was created in recognition of the large number of individuals who were unaware of the risk behaviors of their partners. Among those tested in CTR in 2004, the two heterosexual contact groups were the largest exposure categories, 69% total heterosexual (47% partner with or at risk, 22% partner of indeterminate risk). Among those who tested positive for HIV in this group, heterosexual contact was again the largest exposure category at 46% (32% partner with or at risk, 14% partner of indeterminate risk).

Figure 7.6: Proportion of 2004 CTR Confidential Testing of Individuals by Exposure Category

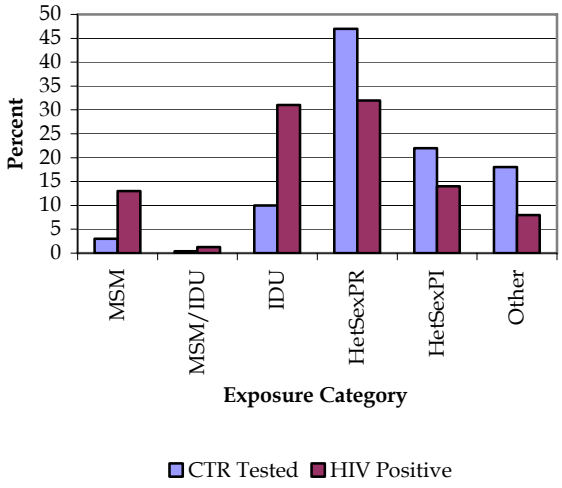
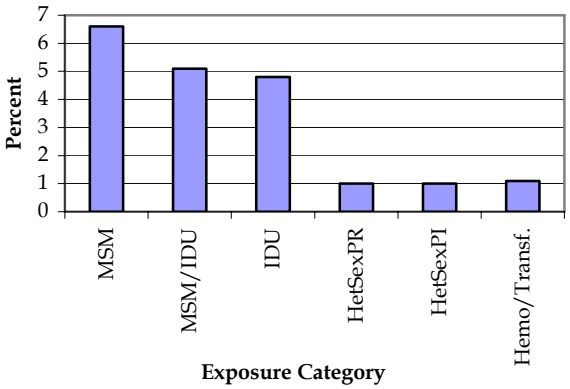


Figure 7.7 illustrates that, when ranked by HIV percent positivity, the top three exposure categories were MSM (6.6%), MSM/IDU (5.1%) and IDU (4.8%).

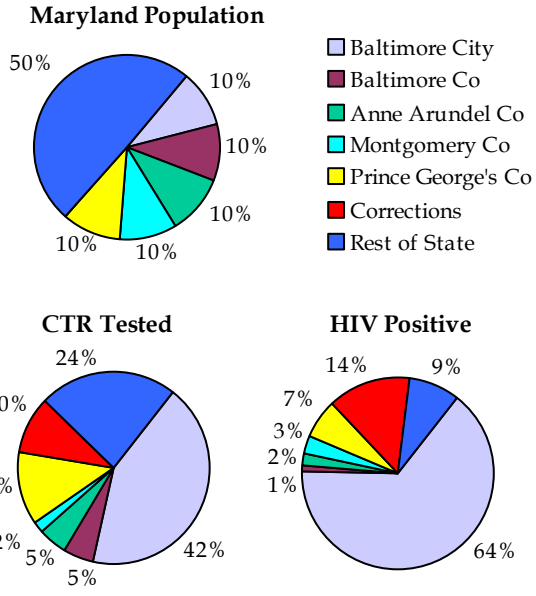
Figure 7.7: HIV Percent Positivity of 2004 CTR Confidential Testing of Individuals by Exposure Category



Geographic Region

Figure 7.8 presents the jurisdictions with the highest numbers of confidential tests. For this report, the CTR testing site county was used instead of the jurisdiction of the individual's residence. The largest proportion of CTR HIV testing occurs in Baltimore City (42%) followed by Prince George's County (12%) and the State Division of Correction

Figure 7.8: Proportion of the 2000 Maryland Population and 2004 CTR Confidential Testing of Individuals by Counties with Highest Numbers of Tests



(DOC) (10%). Baltimore City and the DOC contribute the largest portions of HIV positive results (64% and 14%, respectively). Examination of percent positivity emphasizes the serious HIV infection problem that Baltimore City (2.2%) and the DOC (2.1%) experience. The estimated incarcerated population in 2000 was less than 1% of the state's population (U.S. Department of Justice, 2003).

Confidential Testing - CTR 1995-2004

From February 1995 through December 2004, a total of 323,062 individuals received confidential tests at CTR sites, and 7,010 tested positive for HIV (2.2%). Tables 7.3 and 7.4 compare demographic characteristics of the 2000 Maryland general population to the demographic and exposure characteristics of those individuals within the CTR confidential testing population who had complete UIs and HIV test results from 1995-2004.

Males were the majority (52%) of those confidentially tested from 1995-2004 and were the majority of those who were HIV positive (66%). African-Americans made up 63% of CTR tested individuals and 88% of HIV positives. Individuals in the 20-29 year age group were among those most frequently tested (39%), yet the majority of the HIV positives were in the 30-39 year group (41%). Heterosexual contact was the leading exposure category reported by those tested (65%) and the majority of those who were HIV positive (41%). In terms of percent positivity, MSM/IDU, MSM, and IDU were the leading exposures for HIV positive individuals (11.1%, 10.0%, and 8.3%, respectively). Most confidential tests came from Baltimore City (33%), Prince George's County (14%), and the DOC (11%); HIV positives were primarily from Baltimore City (51%), the Division of Correction (23%) and Prince George's County (10%).

Table 7.3: Cumulative CTR Confidential Testing by Gender, Race/Ethnicity, Age and Exposure (1995-2004)

	2000 Maryland Population***	CTR Tested	HIV Positive	% Positive
GENDER				
Male	2,557,794 (48.3%)	168,217 (52.1%)	4,626 (66.0%)	2.8
Female	2,738,692 (51.7%)	154,842 (47.9%)	2,384 (34.6%)	1.5
Missing		3		
RACE/ETHNICITY				
White	3,286,547 (62.1%)	102,838 (31.8%)	725 (10.3%)	0.7
African-American	1,464,735 (27.6%)	203,081 (62.9%)	6,139 (87.6%)	3.0
Hispanic	227,916 (4.3%)	11,079 (3.4%)	80 (1.2%)	0.7
Other	317,288 (6.0%)	6,064 (1.9%)	66 (0.9%)	1.1
AGE (years)				
< 5	353,393 (6.7%)	328 (0.1%)	9 (0.1%)	2.7
5-12	631,965 (11.9%)	292 (0.1%)	1 (0.0%)	0.3
13-19	507,607 (9.6%)	61,320 (19.0%)	182 (2.6%)	0.3
20-29	656,999 (12.4%)	124,859 (38.6%)	1,296 (18.5%)	1.0
30-39	870,439 (16.4%)	78,333 (24.2%)	2,877 (41.0%)	3.7
40-49	850,758 (16.1%)	42,913 (13.3%)	2,085 (29.8%)	4.9
50-59	624,289 (11.8%)	11,580 (3.6%)	479 (6.8%)	4.1
60 +	801,036 (15.1%)	3,437 (1.1%)	81 (1.2%)	2.4
EXPOSURE*				
MSM	-	6,812 (2.4%)	678 (10.6%)	10.0
IDU	-	29,146 (10.3%)	2,432 (38.0%)	8.3
MSM/IDU	-	1,334 (0.5%)	148 (2.3%)	11.1
Hemophilia/ Transfusion	-	1,202 (0.4%)	20 (0.3%)	1.7
Heterosexual PR	-	124,964 (44.1%)	1,964 (30.7%)	1.6
Heterosexual PI**	-	60,662 (21.4%)	655 (10.2%)	1.1
Pediatric	-	27 (0.0%)	1 (0.0%)	3.7
Other	-	59,267 (20.9%)	502 (7.9%)	0.8
Risk not Specified	-	23,700 ------	327 ------	1.4
Missing	-	15,948 ------	283 ------	1.8
TOTAL	**5,296,486 (100.0%)**	**323,062 (100.0%)**	**7,010 (100.0%)**	**2.2**

* Risk not specified and missing data are not included in distribution percentages.
MSM = Men who have sex with men.
IDU = Injection drug users.
MSM/IDU = Men who have sex with men and are injection drug users.
HetSexPR = Heterosexual contact with a partner who has or is at risk for HIV.
HetSexPI = Heterosexual contact with a partner of indeterminate risk for HIV.
** Not a CDC defined category.
*** Census 2000.

Table 7.4: Cumulative CTR Confidential Testing (1995-2004) by County

COUNTY	2000 Maryland Population**		CTR Tested		HIV Positive		% Positive
Allegany	74,930	1.4%	7,506	2.6%	34	0.5%	0.5
Anne Arundel	489,656	9.2%	14,615	5.0%	75	1.2%	0.5
Baltimore City	651,154	12.3%	96,025	32.7%	3,209	51.1%	3.3
Baltimore County	754,292	14.2%	15,321	5.2%	148	2.3%	1.0
Calvert	74,563	1.4%	3,746	1.3%	16	0.3%	0.4
Caroline	29,772	0.6%	3,401	1.2%	25	0.4%	0.7
Carroll	150,897	2.9%	7,213	2.5%	60	1.0%	0.8
Cecil	85,951	1.6%	3,981	1.4%	15	0.2%	0.4
Charles	120,546	2.3%	5,334	1.8%	24	0.4%	0.5
Dorchester	30,674	0.6%	3,690	1.3%	39	0.6%	1.1
Frederick	195,277	3.7%	7,930	2.7%	53	0.8%	0.7
Garrett	29,846	0.5%	988	0.3%	6	0.1%	0.6
Harford	218,590	4.1%	6,732	2.3%	105	1.7%	1.6
Howard	247,842	4.7%	4,313	1.5%	20	0.3%	0.5
Kent	19,197	0.4%	2,499	0.8%	9	0.1%	0.4
Montgomery	873,341	16.5%	13,042	4.4%	180	2.9%	1.4
Prince George's	801,515	15.1%	39,661	13.5%	601	9.6%	1.5
Queen Anne's	40,563	0.8%	1,558	0.5%	8	0.1%	0.5
Saint Mary's	86,211	1.6%	2,549	0.8%	9	0.1%	0.4
Somerset	24,747	0.5%	1,791	0.6%	23	0.4%	1.3
Talbot	33,812	0.6%	2,333	0.8%	16	0.3%	0.7
Washington	131,923	2.5%	6,201	2.1%	85	1.4%	1.4
Wicomico	84,644	1.6%	8,553	2.9%	47	0.7%	0.5
Worcester	46,543	0.9%	3,943	1.3%	22	0.4%	0.6
Corrections	-------	-------	30,970	10.5%	1,454	23.1%	4.7
Missing*	-------	-------	29,167	-------	727	-------	-------
TOTAL	**5,296,486**	**100.0%**	**323,062**	**100.0%**	**7,010**	**100.0%**	**2.2**

* CTR tests with missing county information are not included in the distribution percentages.
** Census 2000.

Anonymous Testing - CTR 2004

Anonymous tests at CTR sites during 2004 are presented in Tables 7.5 and 7.6. Demographic and exposure characteristics of the CTR population are compared to the Maryland general population. Since all information is in terms of HIV tests and not individuals, it is not possible to determine if a person had multiple anonymous HIV tests, or if they had both anonymous and confidential tests. Of the 12,967 CTR anonymous HIV tests in 2004, 484 (3.7%) were HIV positive.

Gender and race/ethnicity distributions of HIV anonymous tests and HIV positives from anonymous tests follow similar patterns as the corresponding proportions for HIV confidential tests. In 2004, males comprised 56% of the individuals tested anonymously in CTR and the majority of those testing HIV positive (78%). African-Americans were the predominant racial/ethnic group tested anonymously (52%) in 2004, as well as the predominant group testing HIV positive (64%) at anonymous testing sites.

When compared to confidential testing for 2004, the majority of anonymous tests followed a similar age distribution with respect to age groups tested and age groups testing HIV positive. The 20-29 year age group was the one most frequently tested (37%), but the 30-39 and 40-49 year age groups made up most of the HIV positive tests (33% and 34%, respectively).

There were some differences by geographic region between confidential and anonymous

testing data (Table 7.2 versus Table 7.6) in 2004. Prince George's County and Baltimore City reported 12% and 42% of the confidential tests and 12% and 54% of the anonymous tests done at CTR sites. Baltimore City, which represented 42% of confidential tests and 54% of anonymous tests, represented 64% of all HIV positive confidential tests and 81% of all HIV positive anonymous tests done at CTR sites in Maryland. Baltimore City had the highest percent HIV positivity among confidential tests (2.2%) and Talbot County had the highest among anonymous tests (5.9%) done at CTR sites in 2004. The Division of Correction does not provide anonymous testing.

In terms of exposure distribution, anonymous test takers reported higher percent positivity than confidential test takers in 2004 among the MSM, IDU, and MSM/IDU, exposure categories.

Table 7.5: Distribution of the 2000 Maryland Population, 2004 CTR Anonymous Tests, Number of 2004 HIV Positive Tests, and Percent HIV Positive by Gender, Race/Ethnicity, Age and Mode of Exposure

	2000 Maryland Population****		CTR Tests		HIV Positive		% Positive
GENDER	**No.**	**%**	**No.**	**%**	**No.**	**%**	
Male	2,557,794	48.3%	7,194	55.6%	374	78.1%	5.2
Female	2,738,692	51.7%	5,749	44.4%	105	21.9%	1.8
Missing*	-------	-------	24	-------	5	-------	-------
RACE/ETHNICITY							
White	3,286,547	62.1%	4,111	31.8%	52	10.7%	1.3
African-American	1,464,735	27.6%	6,773	52.4%	309	63.9%	4.6
Hispanic	227,916	4.3%	920	7.1%	6	1.2%	0.7
Other	317,288	6.0%	1,128	8.7%	117	24.2%	10.4
Missing*	-------	-------	35	-------	0	-------	0.0
AGE (years)							
< 5	353,393	6.7%	2	0.0%	0	0.0%	0.0
5-12	631,965	11.9%	9	0.1%	0	0.0%	0.0
13-19	507,607	9.6%	1,386	12.0%	5	1.3%	0.4
20-29	656,999	12.4%	4,323	37.3%	73	19.5%	1.7
30-39	870,439	16.4%	2,696	23.3%	125	33.3%	4.6
40-49	850,758	16.1%	2,188	18.9%	127	33.9%	5.8
50-59	624,289	11.8%	796	6.9%	42	11.2%	5.3
60 +	801,036	15.1%	177	1.5%	3	0.8%	1.7
Missing*	-------	-------	1,390	-------	109	-------	7.8
EXPOSURE							
MSM	-		1,613	13.2%	209	45.6%	13.0
IDU	-		1,061	8.7%	65	14.2%	6.1
MSM/IDU	-		93	0.8%	24	5.3%	25.8
Hemophiliac/Transf.	-		39	0.3%	1	0.2%	2.6
Heterosexual PR	-		4,332	35.5%	68	14.8%	1.6
Heterosexual PI**	-		1,743	14.3%	24	5.3%	1.4
Pediatric	-		0	0.0%	0	0.0%	0.0
Other	-		3,336	27.3%	67	14.6%	1.1
Risk not Specified	-		427	-------	6	-------	1.4
Missing*	-		323	-------	20	-------	6.2
TOTAL	**5,296,486**	**100.0%**	**12,967**	**100.0%**	**484**	**100.0%**	**3.7**

* CTR tests with missing gender, race, age, or risk not specified are not included in the distribution percentages.

** Not a CDC defined category.

*** Census 2000.

Table 7.6: Distribution of the 2000 Maryland Population, 2004 CTR Anonymous Tests, Number of 2004 HIV Positive Tests, and Percent HIV Positive by County

COUNTY	2000 Maryland Population**		CTR Tested		HIV Positive		% Positive
	No.	**%**	**No.**	**%**	**No.**	**%**	
Allegany	74,930	1.4%	61	0.5%	0	0.0%	0.0
Anne Arundel	489,656	9.2%	614	4.7%	14	3.0%	2.3
Baltimore City	651,154	12.3%	6,939	53.6%	384	81.4%	5.5
Baltimore County	754,292	14.2%	437	3.4%	6	1.3%	1.4
Calvert	74,563	1.4%	91	0.7%	1	0.2%	1.1
Caroline	29,772	0.6%	5	0.0%	0	0.0%	0.0
Carroll	150,897	2.9%	210	1.6%	2	0.4%	1.0
Cecil	85,951	1.6%	47	0.4%	0	0.0%	0.0
Charles	120,546	2.3%	200	1.5%	3	0.6%	1.5
Dorchester	30,674	0.6%	148	1.1%	0	0.0%	0.0
Frederick	195,277	3.7%	53	0.4%	0	0.0%	0.0
Garrett	29,846	0.5%	34	0.3%	0	0.0%	0.0
Harford	218,590	4.1%	38	0.3%	2	0.4%	5.3
Howard	247,842	4.7%	504	3.9%	10	2.1%	2.0
Kent	19,197	0.4%	32	0.3%	0	0.0%	0.0
Montgomery	873,341	16.5%	929	7.2%	28	5.9%	3.0
Prince George's	801,515	15.1%	1,487	11.5%	17	3.6%	1.1
Queen Anne's	40,563	0.8%	12	0.1%	0	0.0%	0.0
Saint Mary's	86,211	1.6%	37	0.3%	0	0.0%	0.0
Somerset	24,747	0.5%	69	0.5%	0	0.0%	0.0
Talbot	33,812	0.6%	17	0.1%	1	0.2%	5.9
Washington	131,923	2.5%	137	1.1%	4	0.9%	2.9
Wicomico	84,644	1.6%	87	0.7%	0	0.0%	0.0
Worcester	46,543	0.9%	67	0.5%	0	0.0%	0.0
Corrections	-------	-------	680	5.3%	-------	-------	-------
Missing*	-------	-------	15	-------	12	-------	-------
TOTAL	**5,296,486**	**100.0%**	**12,967**	**100.0%**	**484**	**100.0%**	**3.7**

* CTR tests with missing county information are not included in the distribution percentages.

** Census 2000.

CHAPTER 8: HIV AND AIDS IN BALTIMORE CITY AND THE BALTIMORE-TOWSON METROPOLITAN AREA

Introduction

Baltimore City, located in the northern center of the state on Interstate-95, has consistently reported over one-half of Maryland's new HIV cases each year since 1994, when HIV surveillance began in Maryland.

Table 8.1 describes the 2004 incident and prevalent (living on December 31, 2004) HIV and AIDS cases in Baltimore City by ZIP code (if 20 or more cases) and by county in the Baltimore-Towson metropolitan area (Anne Arundel County, Baltimore County, Carroll County, Harford County, Howard County, and Queen Anne's County). The largest percentages of newly diagnosed HIV cases in Baltimore City in 2004 were found in ZIP codes 21217 (13.9%), 21218 (9.6%) and 21215 (7.8%). The largest percentages of newly diagnosed AIDS cases in Baltimore City in 2004 were found in ZIP codes 21217 (10.1%), 21218 (9.6%) and 21223 (9.6%).

While Baltimore City accounts for 12% of Maryland's total population, close to 50% of Maryland's living HIV and AIDS cases were residents of Baltimore City at the time of their diagnosis. On December 31, 2004, there were a total of 14,346 living HIV and AIDS cases in Baltimore City, of which 8,309 (58%) were HIV cases and 6,037 (42%) were AIDS cases. The ZIP codes with the largest proportion of HIV prevalent cases in Baltimore City include 21217 (12.7%), 21215 (9.9%) and 21218 (8.6%). Similarly, the ZIP codes with the largest proportion of AIDS prevalent cases in Baltimore City are 21217 (12.2.%), 21215 (9.8%) and 21218 (9.6%).

Table 8.2 describes the 2004 incident and prevalent HIV and AIDS cases in Baltimore City by gender, race/ethnicity and age group. The HIV and AIDS case numbers and proportions within Baltimore City vary by gender, race/ethnicity, age and geographical area. Living HIV and AIDS cases in Baltimore City are predominantly African American (89%), male (62%), and between 30-49 years old (65%). Those newly diagnosed with HIV in Baltimore City in 2004 were also predominantly African American (86%), male (65%), and between 30-49 years old (61%). The total HIV/AIDS prevalence by expanded demographics is presented in Table 8.3.

Baltimore-Towson Metropolitan Area

The Baltimore-Towson metropolitan area includes Baltimore City, Anne Arundel County, Baltimore County, Carroll County, Harford County, Howard County, and Queen Anne's County. In 2004, the Baltimore-Towson metropolitan area had the fifth highest AIDS case report rate of any major metropolitan area in the United States (32.8 cases per 100,000 population, (CDC)), behind Miami, FL; New York, NY-NJ-PA; Baton Rouge, LA; and Washington, DC-VA-MD-WV. The Baltimore-Towson metropolitan area rate is 2.2 times higher than the national average of 15.0 cases per 100,000 population (CDC).

In 2004, 1,356 (63%) of Maryland's 2,143 incident HIV diagnoses, and 789 (61%) of Maryland's 1,293 incident AIDS diagnoses were among residents of the Baltimore-Towson metropolitan area. On December 31, 2004, 10,270 (63%) of 16,342 people living with HIV in Maryland lived in the Baltimore-Towson metropolitan area and 7,731 (60%) of 12,781 people living with AIDS in Maryland lived in the Baltimore-Towson metropolitan area.

Table 8.1: Incident (Newly Diagnosed during 2004) and Prevalent (Living on December 31, 2004) HIV and AIDS Cases in Baltimore City and the Baltimore-Towson metropolitan area

JURISDICTION	2004 Incident HIV Cases		2004 Incident AIDS Cases		2004 Prevalent HIV Cases		2004 Prevalent AIDS Cases		Total Prevalent HIV/AIDS Cases	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
MARYLAND TOTAL	2,143	100.0%	1,293	100.0%	16,342	100.0%	12,781	100.0%	29,123	100.0%
Baltimore-Towson	1,356	63.3%	789	61.0%	10,270	623.8%	7731	60.5%	18,001	61.8%
Rest of State	787	36.7%	504	39.0%	6,072	37.2%	5,050	39.5%	11,122	38.2%
Baltimore-Towson	1,356	100.0%	789	100.0%	10,270	100.0%	7,731	100.0%	18,001	100.0%
Anne Arundel County	63	4.6%	50	6.4%	423	4.1%	428	5.5%	851	4.7%
Baltimore City	1,086	80.1%	598	75.8%	8,309	80.9%	6,037	78.1%	14,346	79.7%
Baltimore County	145	10.7%	98	12.4%	1,139	11.1%	900	11.6%	2,039	11.3%
Carroll County	5	0.4%	8	1.0%	85	0.8%	47	0.6%	132	0.7%
Harford County	34	2.5%	18	2.3%	156	1.5%	160	2.1%	316	1.8%
Howard County	20	1.5%	16	2.0%	143	1.4%	138	1.8%	281	1.6%
Queen Anne's County	3	0.2%	1	0.1%	15	0.2%	21	0.3%	36	0.2%
ZIP CODE										
21201	42	4.6%	26	4.4%	545	7.1%	296	5.0%	841	6.2%
21202	58	6.3%	44	7.4%	624	8.2%	494	8.3%	1,118	8.2%
21205	30	3.3%	21	3.5%	301	3.9%	257	4.3%	558	4.1%
21206	32	3.5%	30	5.1%	225	3.0%	198	3.3%	423	3.1%
21207	27	2.9%	23	3.9%	172	2.3%	143	2.4%	315	2.3%
21208	1	0.1%	0	0.0%	3	0.0%	4	0.1%	7	0.1%
21209	4	0.4%	2	0.3%	19	0.2%	17	0.3%	36	0.2%
21210	1	0.1%	0	0.0%	19	0.2%	8	0.1%	27	0.2%
21211	7	0.8%	9	1.5%	65	0.9%	70	1.2%	135	1.0%
21212	19	2.1%	13	2.2%	177	2.3%	148	2.5%	325	2.4%
21213	71	7.8%	42	7.1%	613	8.0%	466	7.8%	1,079	7.9%
21214	15	1.6%	5	0.9%	67	0.9%	63	1.1%	130	1.0%
21215	71	7.8%	52	8.8%	759	9.9%	586	9.8%	1,345	9.9%
21216	51	5.6%	39	6.6%	433	5.7%	385	6.5%	818	6.0%
21217	127	13.9%	60	10.1%	971	12.7%	727	12.2%	1,698	12.5%
21218	88	9.6%	57	9.6%	656	8.6%	571	9.6%	1,227	9.0%
21222	0	0.0%	0	0.0%	4	0.1%	3	0.1%	7	0.1%
21223	77	8.4%	57	9.6%	546	7.2%	440	7.4%	986	7.2%
21224	48	5.2%	19	3.2%	316	4.1%	181	3.0%	497	3.7%
21225	18	2.0%	13	2.2%	144	1.9%	113	1.9%	257	1.9%
21226	4	0.4%	2	0.3%	18	0.2%	13	0.2%	31	0.2%
21227	1	0.1%	0	0.0%	23	0.3%	16	0.3%	39	0.3%
21228	0	0.0%	0	0.0%	1	0.0%	1	0.0%	2	0.0%
21229	48	5.2%	31	5.2%	351	4.6%	289	4.8%	640	4.7%
21230	28	3.1%	20	3.4%	203	2.7%	153	2.5%	356	2.6%
21231	24	2.6%	13	2.2%	215	2.8%	163	2.7%	378	2.8%
21234	4	0.4%	3	0.5%	30	0.4%	25	0.4%	55	0.4%
21236	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
21237	4	0.4%	0	0.0%	25	0.3%	14	0.2%	39	0.3%
21239	16	1.8%	12	2.0%	111	1.5%	121	2.0%	232	1.7%
Missing ZIP*	170		5		673		72		745	

Table 8.2: Incident (Newly Diagnosed during 2004) and Prevalent (Living on December 31, 2004) HIV and AIDS Case Demographics in Baltimore City

	2004 Incident HIV Cases		2004 Incident AIDS Cases		2004 Prevalent HIV Cases		2004 Prevalent AIDS Cases		Total Prevalent HIV/AIDS Cases	
TOTAL	**1,086**	**100.0%**	**598**	**100.0%**	**8,309**	**100.0%**	**6,037**	**100.0%**	**14,346**	**100.0%**
GENDER	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Male	701	64.8%	380	63.5%	4,938	59.6%	3,955	65.5%	8,893	62.1%
Female	381	35.2%	218	36.5%	3,342	40.4%	2,082	34.5%	5,424	37.9%
Missing*	4	----	0	----	29	----	0	----	29	----
RACE/ETHNICITY										
White	112	12.5%	45	7.5%	687	9.7%	629	10.4%	1,316	10.1%
African-American	766	85.7%	540	90.3%	6,275	89.0%	5,331	88.3%	11,606	88.6%
Hispanic	8	0.9%	9	1.5%	28	0.4%	59	1.0%	87	0.7%
Other	8	0.9%	4	0.7%	67	0.9%	18	0.3%	85	0.6%
Missing*	192	----	0	----	1,252	----	0	----	1,252	----
AGE (years)										
<5 (Pediatric)	3	0.3%	0	0.0%	17	0.2%	2	0.0%	19	0.1%
5-12 (Pediatric)	1	0.1%	0	0.0%	88	1.1%	29	0.5%	117	0.8%
13-19	29	2.7%	5	0.9%	73	0.9%	74	1.3%	147	1.0%
20-29	189	17.4%	45	7.5%	717	8.6%	208	3.4%	925	6.5%
30-39	285	26.2%	164	27.4%	1,965	23.6%	1,162	19.2%	3,127	21.8%
40-49	377	34.7%	256	42.8%	3,434	41.3%	2,745	45.5%	6,179	43.1%
50-59	162	14.9%	97	16.2%	1,583	19.1%	1,474	24.4%	3,057	21.3%
60+	40	3.7%	31	5.2%	432	5.2%	343	5.7%	775	5.4%
EXPOSURE***										
MSM	62	19.8%	84	16.2%	259	9.9%	1,028	17.5%	1,287	15.2%
IDU	127	40.4%	281	54.0%	1,117	42.5%	3,238	55.3%	4,355	51.3%
MSM/IDU	4	1.3%	8	1.5%	64	2.4%	215	3.7%	279	3.3%
Hemophil/Transf.	1	0.3%	3	0.6%	3	0.1%	11	0.2%	14	0.1%
Heterosexual PR	92	29.3%	142	27.3%	746	28.4%	1,256	21.5%	2,002	23.6%
Heterosexual PI****	23	7.3%	-----	----	311	11.8%	-----	----	311	3.7%
Pediatric	5	1.6%	2	0.4%	124	4.7%	103	1.8%	227	2.7%
Other	0	0.0%	0	0.0%	6	0.2%	0	0.0%	6	0.1%
Risk not Specified	43	----	78	----	330	----	186	----	516	----
Missing	729	----	0	----	5,349	----	0	----	5,349	----

* Cases with missing race or gender are excluded from percent distributions.

** For incident cases, age is at time of diagnosis. For prevalent cases, age is as of 12/31/04.

*** Risk not specified and missing data are not included in distribution percentages.

MSM = Men who have sex with men.
IDU = Injection drug users.
MSM/IDU = Men who have sex with men and are injection drug users.
HetSexPR = Heterosexual contact with a partner who has or is at risk for HIV.
HetSexPI = Heterosexual contact with a partner of indeterminate risk for HIV.

**** Not a CDC defined category.

Table 8.3: Prevalent (Living on December 31, 2004) HIV/AIDS Case Demographics in Baltimore City

	RACE/ETHNICITY						
GENDER/AGE	**White**	**African-American**	**Hispanic**	**Other**	**Missing**	**Total**	
	No.	No.	No.	No.	No.	No.	%
Male							
<5 (Pediatric)	1	12	0	0	1	14	0.2%
5-12 (Pediatric)	3	45	1	0	11	60	0.6%
13-19	1	66	0	0	6	73	0.8%
20-29	32	379	9	2	47	469	5.3%
30-39	225	1,174	20	12	114	1,545	17.4%
40-49	383	3,213	29	16	287	3,928	44.1%
50-59	214	1,811	10	9	177	2,221	25.0%
60+	65	454	4	7	53	583	6.6%
SUBTOTAL	924	7,154	73	46	696	8,893	100.0%
Female							
<5 (Pediatric)	0	3	0	0	1	4	0.1%
5-12 (Pediatric)	0	48	0	0	8	56	1.0%
13-19	0	68	0	0	5	73	1.3%
20-29	52	339	0	3	59	453	8.3%
30-39	142	1,245	9	10	175	1,581	29.2%
40-49	133	1,897	4	16	187	2,237	41.3%
50-59	53	685	0	7	83	828	15.3%
60+	8	159	1	0	23	191	3.5%
SUBTOTAL	388	4,444	14	36	541	5,423	100.0%
Missing Gender	4	9	3	14	0	30	
TOTAL	1,316	11,607	90	96	1,237	14,346	

CHAPTER 9: PREVENTION AND SERVICES

HIV Prevention

The State of Maryland's prevention program spends more than $10 million dollars in federal and state resources to reduce new HIV infections in communities most impacted by HIV and AIDS. The 2004-2008 priorities for HIV prevention were determined based on epidemiological data, community input and guidance from the Centers for Disease Control and Prevention. These priorities are: (1) HIV Infected Persons, (2) High Risk Heterosexual Persons, (3) Injecting Drug Users, (4) Men Who Have Sex with Men, (5) Special Populations, including Latinos, Deaf and Transgender Persons.

The state plans, develops, funds and evaluates interventions proven to reduce HIV transmission risks. It does this in collaboration with community-based groups, state and county agencies, faith-based groups, and other prevention partners. Involving affected communities and prevention partner organizations in the design and delivery of HIV prevention services helps in meeting cultural competence goals with diverse target populations.

Planning

HIV prevention planning is spearheaded by the Maryland HIV Prevention Community Planning Group (CPG).

Members of the CPG include:

- Persons experienced with the issues surrounding HIV risk, including poverty, incarceration, commercial sex work, and injection drug use.
- Persons with experience serving high-risk populations.
- Persons with expertise in behavioral science, epidemiology, substance use, mental health, public education and health planning.

The CPG works to develop and utilize community-level HIV prevention expertise specific to the HIV/AIDS epidemic in Maryland to most effectively prevent new HIV infections in the state. CPG activities aim to:

1) increase understanding of changes in the state's prevention needs utilizing epidemiological, behavioral science and community-level data;

2) develop an HIV Prevention Plan based on current statistics, trends and best practices; and

3) communicate prevention information to build policies, programs and support to prevent new infections in the State.

The CPG HIV Prevention Plan can be found at the AIDS Administration website: www.dhmh.state.md.us/AIDS/.

Resource Allocation and Program Development

The AIDS Administration distributes HIV prevention funds to regions in Maryland according to a formula based on the following weighted variables: population, living HIV and AIDS cases, new HIV cases, poverty, and gonorrhea. The formula, developed with input from community partners, serves as a vehicle to regionally allocate state resources based on prevention needs,

and the potential for prevention programs to most effectively reduce new cases statewide. Regional allocations are re-calculated annually to ensure that the most current data are used to allocate funds.

Once the amount of funding available to a region is calculated, the AIDS Administration uses the priorities in the CPG Plan to inform prevention interventions and strategies. The CPG HIV Prevention Plan is also used to guide the development of new resources since it combines scientific evidence with community norms to identify prevention needs.

The Maryland AIDS Administration funds evidence-based HIV prevention programs, shown to work locally or in populations very similar to those targeted in Maryland. Some prevention interventions are implemented in every jurisdiction of the state, such as HIV Counseling, Testing and Referral (CTR) services. Others are targeted to specific communities or individuals at high risk for transmitting or acquiring HIV infection. Maryland's HIV prevention interventions fall into one of the following categories:

HIV Counseling, Testing and Referral (CTR)

Individual level pre-test counseling, HIV antibody testing, post-test communication of test results with risk reduction counseling, and referrals as needed.

Partner Counseling and Referral Services (PCRS)

Notification and counseling of sex and/or needle sharing partners of HIV positive individuals with referrals as needed.

Individual-Level Interventions (ILI)

Health education and risk reduction counseling with skills practice provided to one person at a time.

Prevention Case Management (PCM)

Client-centered health education and risk reduction counseling plus case management.

Group-Level Interventions (GLI)

Health education and risk reduction counseling with skills practice provided in small groups of 5-12 individuals.

Outreach

Brief educational interventions conducted face-to-face in places where clients congregate.

Health Communication (HC)

Educational presentations or lectures that deliver prevention messages, provide information, and increase awareness.

Public Information (PI)

Distribution of materials to provide prevention information, support risk-reduction, and increase awareness.

Other

Interventions not described above, including structural and community-level interventions.

Programming is implemented through local health departments, community based organizations, drug treatment facilities, correctional institutions, clinics, middle and high schools, and universities.

Recent Prevention Initiatives

The Maryland AIDS Administration has launched a new initiative to integrate HIV prevention activities in primary care settings. It is directing over a half million dollars a year to new HIV prevention interventions targeting high-risk people who are already infected with HIV. These new projects use evidence based interventions to

assist HIV-positive persons identify and overcome barriers to safer behavior.

The Maryland AIDS Administration is collaborating with drug treatment providers to integrate HIV prevention activities in drug treatment services. Injection drug users are at high risk for becoming HIV infected and have directly and indirectly impacted the epidemic in Maryland. The AIDS Administration in collaboration with the Maryland Alcohol and Drug Abuse Administration, the Baltimore City Drug Court, Maryland Parole and Probation and several community based providers is directing $400,000 annually to integrate HIV risk reduction services in drug treatment settings.

Evaluation

The Maryland AIDS Administration evaluates the processes and outcomes of prevention interventions to ensure that community, state, and national goals are being optimized and to continuously improve program outcomes. Maryland has a nationally recognized client level prevention reporting and evaluation system, which provides rapid results to program implementers and managers. Evaluation resources are also used to help community partners apply evaluation findings to prevention program planning and resource development.

HIV SERVICES

The Maryland Department of Health and Mental Hygiene (DHMH), AIDS Administration, receives funds from the federal Health Resources and Services Administration (HRSA) under Title II and Title IV of the Ryan White Comprehensive AIDS Resource Emergency (CARE) Act to improve the quality, availability, and organization of health and support services for People Living with HIV/AIDS (PLWHA) and their families. In accordance with the requirements of the CARE Act, a proposed Allocation Plan is distributed to seek input on the intended allocation of Maryland's Title II funds. Title IV funds are allocated amongst an established network of service providers in Baltimore City and Prince George's County that focus on women, infants, children, and youth, infected and affected by HIV/AIDS.

Title II Grant Requirements

In accordance with the Ryan White CARE Act, all programs funded by Title II must target medical and/or social services to low-income, and uninsured people with HIV/AIDS. Title II funds may be used for ambulatory outpatient medical, oral and mental health services, the AIDS Drugs Assistance Program (ADAP) and other supportive services, such as case management and client advocacy. Maryland utilizes regional HIV CARE Consortia as advisory boards that consist of people living with HIV/AIDS, their affected family members, local HIV/AIDS service providers, local government representatives, and other community leaders to advise the AIDS Administration in planning these services.

Title II Eligibility

Title II-funded services are available to individuals who are Maryland residents, under 400% of federal poverty guidelines and HIV positive. Eligibility for the Maryland AIDS Drugs Assistance Program (MADAP) extends to HIV-positive Maryland residents with incomes up to 500% of the federal poverty guidelines. However, in all cases, Ryan White funds must be used as the payer of last resort. For example, third-party insurance, including Medicaid, must be utilized for individuals eligible for those services.

To comply with HRSA standards, the state must demonstrate that Title II funds are used for services to infants, children, and women with HIV/AIDS in proportion to the

percent of women and children infected with HIV/AIDS in Maryland. The services should include medical and support services for the target populations, as well as treatment measures to prevent HIV transmission from mother to baby. Maryland is required to assure that at least 30% of Title II funds address the needs of infants, children, youth and women.

Title II Services Planning

Title II funding includes two mandatory set-asides from HRSA: the AIDS Drugs Assistance Program and funding for the Minority AIDS Initiative. The remainder of the Title II award, minus the AIDS Administration's administrative cost, is allocated to HIV/AIDS services statewide.

Title II programs must take into consideration the service gaps in all areas of the state, as well as the level and source of funds received by jurisdictions within the state, to achieve a balance between funding in large, high incidence areas and in rural areas. Title II funds are limited, requiring optimal use of economies of scale whenever possible to meet the needs of as many HIV seropositive Maryland residents as possible. Title II services in low incidence areas are regionalized whenever feasible and referral networks have been established to assure access for individuals with HIV living in each region. Given overlapping geographic jurisdictions and to maximize federal resources, the Maryland Title II program collaborates with the Title I Eligible Metropolitan Area Programs in Baltimore and Washington DC, as well as the Delaware Title II Emerging Communities Program that includes Cecil County.

Local health departments (LHDs) receive funding directly from the AIDS Administration according to a formula based on the following weighted variables: number of living AIDS cases, number of living HIV cases, poverty, number of gonorrhea cases, number of chlamydia cases, and whether a jurisdiction is characterized as rural or urban. Title II funds are allocated to Maryland jurisdictions by applying the formula to obtain a percentage of funds for each jurisdiction. The sole exception of this is in Southern Maryland where Charles County serves as the lead agency for funding for Calvert, Charles and St. Mary's Counties. Regardless of the funding mechanism, the HIV CARE Consortium in each region acts as the advisory planning and priority-setting body for Title II. LHDs may use Title II funds to provide services directly or subcontract the funds to local providers. The distribution of funds at the local level is in accordance with local procurement rules.

Title II Service Components

Service categories, which may be funded under Title II, include: AIDS Drug Assistance Program (ADAP), Consortium, Home and Community-Based Services, State Direct Services and Insurance Continuation. The AIDS Administration proposes to allocate the total amount of Title II funds to continue to implement the following activities, which are a part of HRSA's approved activities:

- The provision of medications through MADAP (Maryland AIDS Drug Assistance Program);
- Health insurance continuation for clients ineligible for MADAP;
- Administration support, planning and evaluation of the MADAP and insurance continuation programs;
- State Direct funding to the LHDs for the direct provision of comprehensive health and social support services for people with HIV/AIDS and for special initiatives, including: transitional case management for soon-to-be released

inmates; oral health programs; service delivery programs in Baltimore City and the Suburban region for women, infants and children and treatment adherence activities;

- Congressional Black Caucus Minority AIDS Initiative projects; and
- The administration of the Title II program, including costs related to the disbursal and monitoring of funds; collection, analysis, and reporting of programmatic and fiscal data required by HRSA; provision of technical support to grantees in service delivery and data collection; quality assurance; and program evaluation.

Other Services Programs

For many years, health insurance continuation in Maryland has been provided through the State of Maryland AIDS Insurance Assistance Program (MAIAP). MAIAP provides services to PLWHA who are disabled. In April 2000, the AIDS Administration assumed responsibility for MAIAP as part of the development of a continuum of insurance benefits that includes the MADAP-Plus insurance assistance program funded by Title II. MAIAP is funded with state general funds.

Since 1998, the AIDS Administration has received a competitively- awarded grant from the Department of Housing and Urban Development for its Rural Housing Opportunities for People Living with AIDS (HOPWA) program. In 2004, the State of Maryland became a new recipient of ongoing formula HOPWA funding for this same entitlement area. The competitive grant period ends in December 2005.

The HOPWA funds are intended to increase housing stability and reduce the risk of homelessness amongst PLWHA in the rural Eastern Shore, St. Mary's County, and Western Region of Maryland. Funds are prioritized for long and short-term rental assistance activities as well as housing case management.

FACT SHEETS

The following fact sheets are now available from the AIDS Administration Center for Surveillance and Epidemiology:

Co-morbidities for HIV/AIDS: Hepatitis B and C

Co-morbidities for HIV/AIDS: STDs in Maryland

HIV/AIDS among African-Americans in Maryland

HIV/AIDS among Hispanics in Maryland

HIV/AIDS among the Incarcerated in Maryland

HIV/AIDS among Men who have Sex with Men in Maryland

HIV/AIDS among Heterosexuals in Maryland

HIV/AIDS among Women in Maryland

HIV/AIDS among the Youth and the Elderly in Maryland

HIV/AIDS and Injection Drug Use in Maryland

Perinatal HIV/AIDS Surveillance in Maryland

CO-MORBIDITIES FOR HIV/AIDS: HEPATITIS B AND C

- Hepatitis B is a blood borne viral infection transmitted primarily through high-risk sexual behavior.

- Hepatitis C is a blood borne viral infection transmitted primarily through injection drug use.

- In the United States, an estimated 1.25 million people are chronically infected with the hepatitis B virus (HBV). In 2003, an estimated 73,000 new hepatitis B infections occurred in the United States; and in 2002 there were 2.3 cases per 100,000 population reported in Maryland. Deaths from chronic liver diseases occur in 15-25% of chronically hepatitis B infected persons. Hepatitis B is preventable through the use of a licensed vaccine available since 1982.[1]

- An estimated 3.9 million people in the United States (1.8%) are infected with the hepatitis C virus (HCV), of which 2.7 million are chronically infected. An estimated 30,000 new hepatitis C infections occurred in the United States in 2003. Chronic infection occurs in approximately 75-85% of all hepatitis C infected individuals. Approximately 70% of chronic hepatitis C infections result in liver disease, which is fatal in up to 3% of chronic liver disease cases. There is no vaccine to prevent hepatitis C. The prescription drugs Interferon and Ribavirin are licensed to treat persons with chronic hepatitis C.[2]

- A 2002 serosurvey of entrants to the Baltimore City detention facilities and Maryland prisons found that there were 25.2% ever infected by hepatitis B (surface antigen or core and surface antibody) and 29.7% had antibodies to hepatitis C.[3]

- Results from the Multicenter AIDS Cohort Study (MACS), found nearly 10% of HIV-infected participants also had chronic hepatitis B infection, and HIV infection increases the risk of cirrhosis and liver-related death in HBV infected persons.[4,5] There are no conclusive data that demonstrate an adverse effect of HBV infection on the natural history of HIV disease.

- About one quarter of HIV-infected persons in the United States are also infected with HCV.[6] There are conflicting reports on the effect of HCV infection on the natural history of HIV disease. While available evidence indicates that antiretroviral therapies can be safely administered to persons with HIV/HCV co-infections, those receiving HIV treatment should be closely monitored for hepatotoxicity. Furthermore, despite the lack of published data about treating HCV in the HIV infected person, it is recommended that coinfected persons be considered for HCV treatment.[7]

- Among injection drug users in Baltimore, individuals who were HIV positive, African-American, and injected longer were more likely to be HCV positive than individuals without these characteristics.[8]

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[1] Centers for Disease Control and Prevention (CDC). August 2003. Viral Hepatitis B Fact Sheet. Available on the Internet: www.cdc.gov/ncidod/diseases/hepatitis/b/fact.htm.
[2] Centers for Disease Control and Prevention (CDC). August 2003. Viral Hepatitis C Fact Sheet. Available on the Internet: www.cdc.gov/ncidod/diseases/hepatitis/c/fact.htm.
[3] Solomon L, Flynn C, Muck K, Vertefeuille J. March 2004. Prevalence of HIV, Syphilis, Hepatitis B, and Hepatitis C among Entrants to Maryland Correctional Facilities. Journal of Urban Health; 81(1).
[4] Thio C, et al. 2002. HIV-1, Hepatitis B Virus, and Risk of Liver-Related Mortality in the Multicenter Cohort Study (MACS). Lancet; 360:9349.
[5] Colin JF, et al. 1999. Influence of HIV Infection on Chronic Hepatitis B in Homosexual Men. Hepatology; 29:1306.
[6] Centers for Disease Control and Prevention (CDC). August 2001. Frequently Asked Questions and Answers about HIV/HCV Coinfection. Available on the Internet: www.cdc.gov/hiv/pubs/facts/HIV-HCV_Coinfection.htm.
[7] Sulkowski MS and Thomas DL. 2003. Hepatitis C in the HIV-Infected Person. Ann Intern Med 138:197.
[8] Thomas DL, et al. 1995. Correlates of Hepatitis C Virus Infections among Injection Drug Users. Medicine (Baltimore); 74(4):212.

CO-MORBIDITIES FOR HIV/AIDS: STDS IN MARYLAND

HIV/AIDS is often associated with sexually transmitted diseases. STD data serve as a valuable source of information for three main reasons. First, HIV can be transmitted through sexual intercourse; second, STDs can serve as indicators of high-risk sexual behavior that is associated with an increased risk of HIV infection; and third, some STDs, such as chlamydia, gonorrhea, and syphilis, produce lesions that can facilitate the transmission of HIV.

- Infection with other STDs can increase the risk of new HIV infections two to five-fold by facilitating HIV transmission.[1]
- According to the Centers for Disease Control and Prevention, among states reporting STDs in 2004, Maryland had the 2nd highest rate of syphilis (6.9 cases/100,000 population), the 12th highest rate of gonorrhea (150.6 cases/ 100,000 population), and the 12th highest rate of chlamydia (362.2 cases/100,000 population).[2]
- Among the 20 cities that were most burdened by STDs in 2004, the CDC reported that Baltimore City had the 3rd highest rate of syphilis (33.2 cases/100,000 population), the 4th highest rate of gonorrhea (626.4 cases /100,000 population), and the 7th highest rate of chlamydia (1,057.9 cases /100,000 population) in the nation.[2]
- The STD Division of DHMH reports a decline in the rate of syphilis cases from 1997 to 2004 in both Maryland (from 17.4 to 6.8 per 100,000 population) and Baltimore City (from 99.3 to 32.9 per 100,000 population).

STD Cases and Incidence Rates (per 100,000) by County for Chlamydia, Gonorrhea, and Syphilis in 2004

	Chlamydia		Gonorrhea		Syphillis	
COUNTY	Cases	Rate	Cases	Rate	Cases	Rate
Allegany	122	166.6	35	47.8	0	0.0
Anne Arundel	983	193.0	330	64.8	20	3.9
Baltimore City	6,651	1047.0	3,938	619.9	209	32.9
Baltimore County	2,403	307.9	756	96.9	35	4.5
Calvert	179	207.5	16	18.5	1	1.2
Caroline	105	338.5	19	61.2	0	0.0
Carroll	106	63.7	25	15.0	1	0.6
Cecil	127	134.9	27	28.7	0	0.0
Charles	407	299.8	118	86.9	3	2.2
Dorchester	88	285.6	31	100.6	0	0.0
Frederick	359	166.0	113	52.3	3	1.4
Garrett	19	63.3	0	0.0	0	0.0
Harford	480	204.4	93	39.6	5	2.1
Howard	278	103.5	91	33.9	5	1.9
Kent	59	295.3	20	100.1	0	0.0
Montgomery	1,163	125.3	175	18.9	13	1.4
Prince George's	4,975	590.9	1,913	227.2	66	7.8
Queen Anne's	58	129.3	23	51.3	1	2.2
Saint Mary's	180	191.4	47	50.0	1	1.1
Somerset	135	531.4	67	263.7	1	3.9
Talbot	75	214.0	20	57.1	2	5.7
Washington	400	289.8	134	97.1	0	0.0
Wicomico	416	472.7	227	258.0	14	15.9
Worcester	184	364.9	79	156.7	0	0.0
TOTAL	**19,952**	**359.0**	**8,297**	**149.3**	**380**	**6.8**

Source: Division of Sexually Transmitted Diseases/HIV Partner Counseling and Referral Services, DHMH

[1] Fleming DT, Wasserheit JH. 1999. From Epidemiological Synergy to Public Health Policy and Practice: The Contribution of Other Sexually Transmitted Diseases to Sexual Transmission of HIV Infection. Sexually Transmitted Infection;75:3-17.
[2] Centers for Disease Control and Prevention (CDC). September 2005. Sexually Transmitted Disease Surveillance, 2004. Atlanta, GA: U. S. Department of Health and Human Services.

HIV/AIDS AMONG AFRICAN-AMERICANS IN MARYLAND

- AIDS in Maryland and in the United States disproportionately affects African-Americans. Based on the 2000 United States Census, 12% of the United States population is African-American and 28% of the Maryland population is African-American. By the end of 2004, African-Americans represented 43% of living AIDS cases in the United States[1] and on December 31, 2004, 80% of living AIDS cases in Maryland.

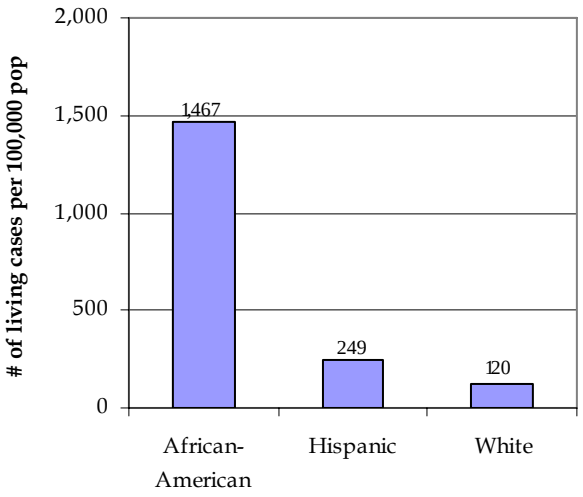
- AIDS is the leading cause of death among African-American men and women ages 25-44 years in Maryland.[2]

- By the end of 2004, of the 14,994 AIDS deaths recorded in Maryland, 11,545 (77%) were African-American.

- On December 31, 2004, there were 1,467 African-Americans living with HIV/AIDS for every 100,000 African-Americans in Maryland, 249 Hispanics living with HIV/AIDS for every 100,000 Hispanics, and 120 whites living with HIV/AIDS for every 100,000 whites (see Figure 1). The African-American HIV/AIDS prevalence rate is 5.9 times the rate for Hispanics and 12.2 times the rate for whites in Maryland.

- Of African-Americans living with HIV/AIDS on December 31, 2004, 64% were male, 67% were ages 30-49, 54% were residents of Baltimore City and 22% were residents of suburban Washington D.C.

Figure 1: 2004 HIV/AIDS Prevalence Rates by Race/Ethnicity



- Among African-Americans living with HIV/AIDS, 45% reported injection drug use, 34% reported heterosexual contact, and 15% reported being a man who has had sex with a man (MSM).

- Of the newly diagnosed HIV cases in 2004, 1,284 (79%) were African-American and of the newly diagnosed AIDS cases in 2004, 1,077 (83%) were African American.

- African-American women represent an increasing proportion of new HIV and AIDS cases each year. Of African-American AIDS cases, 13% were female in 1985 and 39% were female in 2004. Of African-American HIV cases, 33% were female in 1994, when HIV surveillance began in Maryland, and 37% were female in 2004.

- African-Americans are the predominant racial/ethnic group tested confidentially at counseling, testing and referral (CTR) sites (68%) and identified as HIV infected (87%). The percent positivity among confidentially tested African-Americans was 1.9%, which is substantially higher than the rates observed for Hispanics (0.6%) and whites (0.5%).

[1] Centers for Disease Control and Prevention (CDC). 2004. HIV/AIDS Surveillance Report, Year-End Edition; 16.
[2] Maryland Department of Health and Mental Hygiene, Vital Statistics Administration. 2003. Maryland Vital Statistics Annual Report, 2003: Table 43B, p.150.

HIV/AIDS AMONG HISPANICS IN MARYLAND

- According to the 2000 United States Census, Hispanics comprise 13% of the United States population and 4% of the Maryland population.[1] By the end of 2004, Hispanics represented 20% of living AIDS cases reported in the United States[2] and on December 31, 2004, 3% of living AIDS cases in Maryland.

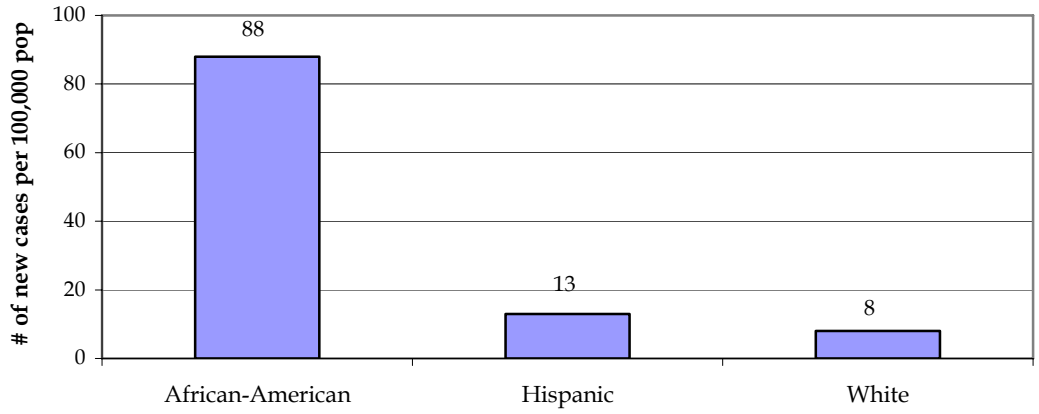
- Among the 567 Hispanics living with HIV/AIDS on December 31, 2004:
  - 427 (75%) were men;
  - 391 (69%) were between the ages of 30 and 49; and
  - 346 (61%) were residing in either Prince George's County or Montgomery County (suburban Washington, D.C.) at the time of their diagnosis.

- Among the 358 Hispanics living with HIV/AIDS on December 31, 2004 who reported information about their exposure to HIV:
  - 156 (44%) reported heterosexual contact;
    - 92 (59%) men,
    - 64 (41%) women;
  - 118 (33%) reported that they were a man who has had sex with man (MSM);
  - 65 (18%) reported injection drug use (IDU);
  - 9 (2%) reported that they were a man who has had sex with man and had injected drugs (MSM/IDU); and
  - 10 (3%) reported other exposures.

- There were 30 newly diagnosed HIV cases in 2004 among Hispanics (2% of all HIV cases) and 35 newly diagnosed AIDS cases among Hispanics in 2004 (3% of all AIDS cases).

- Figure 1 depicts 2004 incidence rates per 100,000 population for African-Americans, Hispanics and whites in Maryland. The height of the bar indicates the number of newly diagnosed HIV infections per 100,000 population. The HIV incidence rate for Hispanics is 1.6 times the rate for whites, which indicates that if there were equivalent population sizes, Hispanics would account for 1.6 times as many new HIV diagnoses as whites.

Figure 1: Maryland HIV Incidence Rate during 2004 by Race/Ethnicity



[1] Census 2000.
[2] Centers for Disease Control and Prevention (CDC). 2004. HIV/AIDS Surveillance Report, Year-End Edition; 16.

HIV/AIDS AMONG THE INCARCERATED IN MARYLAND

- As of July 2005, the 26 state correctional facilities housed 21,918 males and 1,154 females. Of 22,839 with racial/ethnic information, 75.8% were African-American and 23.9% were white. The average age was 35.2 years old; the average sentence was 167.3 months; and 2,251 inmates were serving life sentences. Twenty-two percent (21.8%) of the inmates' major convicting offense was drug-related.[1]

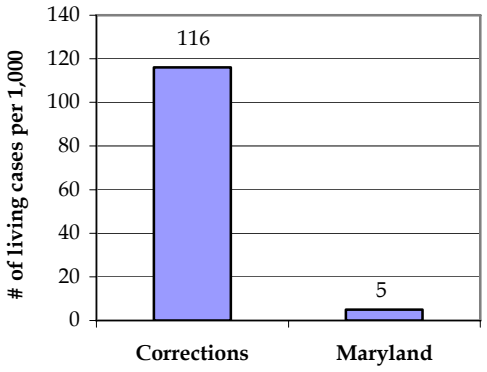
- Maryland, with 3.5 percent of its state prisoners testing HIV positive in 2001, was third nationwide behind New York, at 8.1 percent and Florida, at 3.6 percent.[2]

- By the end of December 2004, 1,515 (5.6%) of the 27,260 AIDS cases and 639 (4.2%) of the 15,199 AIDS deaths in Maryland were incarcerated at the time of diagnosis.

- Maryland inmates represented 84 (3.9%) of new HIV cases and 83 (6.4%) of new AIDS cases in 2004. Of the 29,123 persons living with HIV/AIDS in Maryland, 2,686 (9.2%) were residing in correctional facilities.

- In 2004, there were 116 persons living with HIV/AIDS for every 1,000 persons imprisoned in state correctional facilities. The prevalence rate for the general population is 5 cases living with HIV/AIDS for every 1,000 Marylanders. The HIV/AIDS prevalence rate in prisons is 24 times the rate for the general population.

Figure 1: 2004 HIV/AIDS Prevalence



- Of inmates living with HIV/AIDS in 2004, 84.3% were male, 88.9% were African-American, and 78.5% were ages 30-49. Among those with a reported exposure category, 72.1% reported injection drug use (IDU), 17.9% reported heterosexual contact, 3.1% reported that they were a man who has had sex with a man (MSM), and 3.1% reported that they were a man who has had sex with a man and injected drugs (MSM/IDU).

- Of those individuals who tested for HIV in Maryland prisons in 2004, 2.1% were positive. This percent positivity among tested inmates was substantially higher than the state average percent positivity (1.5%) at CTR sites. It is important to note that Maryland prisons routinely offer voluntary HIV testing to all inmates upon incarceration.

- A 2002 serosurvey of entrants to Maryland state prisons reported that newly incarcerated females have higher HIV rates than newly incarcerated males (12.5% female, 3.7% male).[3]

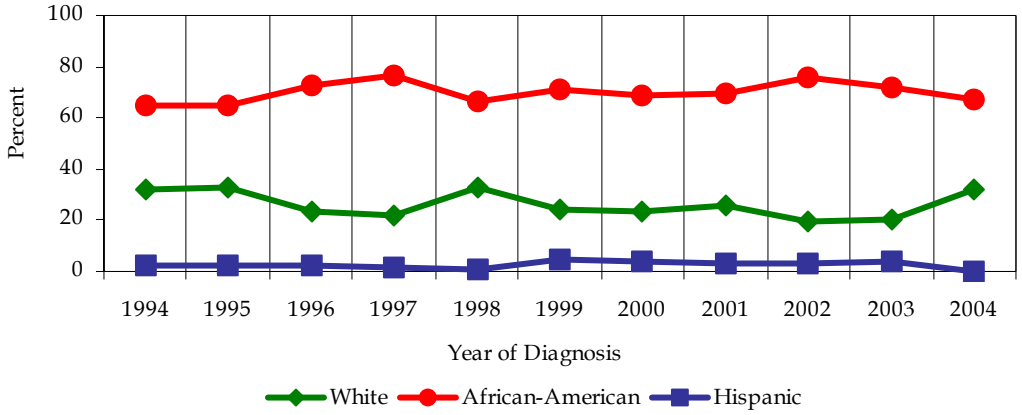
[1] *For more information on general prison population statistics, contact the Maryland Department of Public Safety and Correctional Services, Research and Statistics Department at 410-339-5021.*
[2] Maruschak, LM. January 2004. HIV in Prisons, 2001. Washington DC: US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
[3] Maryland Department of Health and Mental Hygiene, AIDS Administration; and Maryland Department of Public Safety and Correctional Services, Division of Correction. March 2003. Examination of HIV, Syphilis, Hepatitis B and Hepatitis C in Maryland Correctional Facilities.

HIV/AIDS AMONG MEN WHO HAVE SEX WITH MEN IN MARYLAND

Men who have sex with men (MSM) in Maryland have experienced high levels of morbidity and mortality due to HIV/AIDS. MSM refers to any man who has sex with a man, whether he identifies himself as gay, bisexual, or heterosexual. The MSM risk group is diverse, including men from a range of socioeconomic, racial/ethnic, and educational backgrounds. A separate risk category exists for men who have sex with men who are also injection drug users (MSM/IDU), a group at particularly high risk for HIV infection.

- MSM constituted the largest portion of AIDS cases in Maryland until 1991, when injection drug use (IDU) became the most common mode of exposure. Since 1994, MSM has remained the third most common mode of exposure among HIV cases, next to heterosexual contact, which became the most common risk group in 2002, and IDU.
- In 2004, MSM accounted for 129 (19%) new HIV cases and 209 (19%) new AIDS cases in Maryland. On December 31, 2004, MSM accounted for 596 (12%) of living HIV cases and 2,854 (24%) of living AIDS cases in Maryland.

Figure 1: Proportion of new HIV Cases among MSM by Year of Diagnosis and Race/Ethnicity



- African Americans accounted for 65% of new HIV cases among MSM in 1994. In 2004, 67% of new HIV cases among MSM were African American (see Figure 1).
- MSM accounted for 15% of new HIV infections in 1994, decreased to 12% in 1997, and has been increasing since then. In 2004, MSM accounted for 19% of new HIV infections.
- Research suggests an increase in high-risk behaviors for HIV and sexually transmitted infections, such as syphilis and gonorrhea,[1,2] among MSM. Among factors that may be contributing to these increases are: the use of internet chat rooms and the popularity of club drugs such as ecstasy (MDMA) for casual sex partnering among MSM[3], and, with the advent of highly active antiretroviral therapy, the perception that HIV/AIDS is a manageable disease causing some to take fewer precautions to prevent HIV infection[4].

[1] Centers for Disease Control and Prevention (CDC). 2002. Primary and Secondary Syphilis among Men who have Sex with Men--New York City, 2001. MMWR; 51(38):853-6.
[2] Fox KK, del Rio C, Holmes KK, Hook EW 3rd, Judson FN, Knapp JS, Procop GW, Wang SA, Whittington WL, Levine WC. 2001. Gonorrhea in the HIV Era: a Reversal in Trends among Men who have Sex with Men. Am J Public Health; 91(6):959-64.
[3] Halkitis PN, Parsons JT, Wilton L. 2003. Barebacking among Gay and Bisexual Men in New York City: Explanations for the Emergence of Intentional Unsafe Behavior. Arch Sex Behav; 32(4):351-7.
[4] Ostrow DE, Fox KJ, Chmiel JS, Silvestre A, Visscher BR, Vanable PA, Jacobson LP, Strathdee SA. 2002. Attitudes towards Highly Active Antiretroviral Therapy Are Associated with Sexual Risk Taking among HIV-Infected and Uninfected Homosexual Men. AIDS; 16(5):775-80.

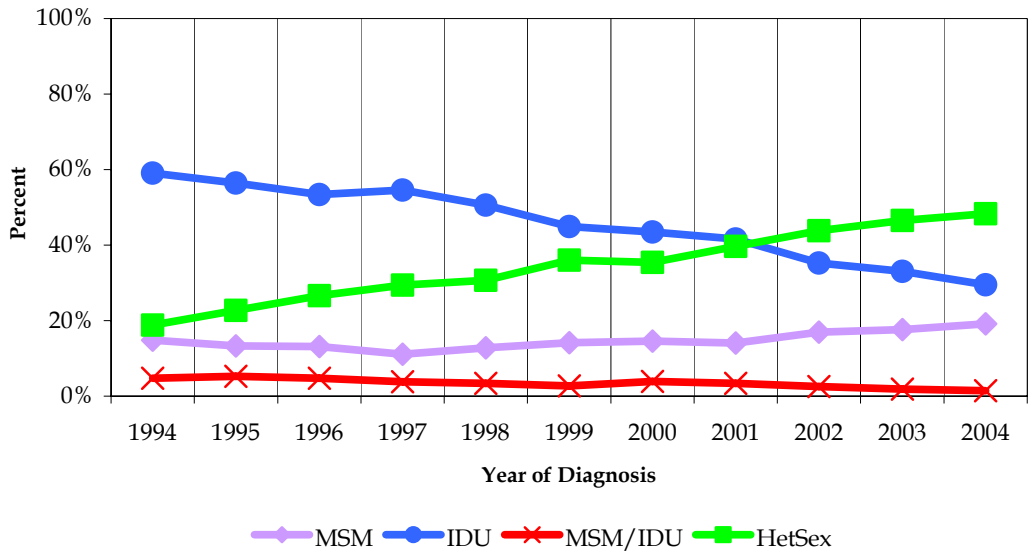
HIV/AIDS AMONG HETEROSEXUALS IN MARYLAND

In 2004, heterosexual contact (man or woman who has sex with a member of the opposite sex) was the most common mode of exposure among newly diagnosed HIV cases in Maryland.

The CDC has one category for heterosexual sex: HetSexPR: Heterosexual Contact with a Person with or at Risk for HIV Infection. For HIV cases, Maryland has added an additional category: HetSexPI: Heterosexual Contact with a Person of Indeterminate Risk for HIV Infection. As of December 31, 2004, HetSexPR accounted for 29% of prevalent HIV cases and 26% of prevalent AIDS cases in Maryland. HetSexPI accounted for 16% of prevalent HIV cases.

- When HIV reporting began in Maryland in 1994, 19% of those newly infected with HIV reported heterosexual contact as their primary mode of exposure and the percentage has been increasing every year since then. In 2002, heterosexual contact became the most common mode of exposure among those newly diagnosed with HIV accounting for 43% of reported exposures. In 2004, 49% of new HIV infections in Maryland are among those reporting heterosexual contact as their primary mode of exposure (see Figure 1).
- In 1985, about 3% of all newly diagnosed AIDS patients reported HetSexPR as their primary mode of exposure. In 2004, almost 37% of all newly diagnosed AIDS patients reported HetSexPR as their primary mode of exposure.
- In 1994, the majority of newly diagnosed HIV cases reporting heterosexual contact as their primary mode of exposure were female (69%). Over time, the gender gap for heterosexuals has closed, with males surpassing females in 2001 (51% male). In 2004, the proportions of those reporting heterosexual contact as their primary mode of exposure were male (49%) and female (51%).
- In 2004, those newly diagnosed with HIV and reporting heterosexual contact as their mode of transmission were 84% African-American, 7% white, 8% other race/ethnicity, 1% Hispanic and 61% were between ages 30-49.

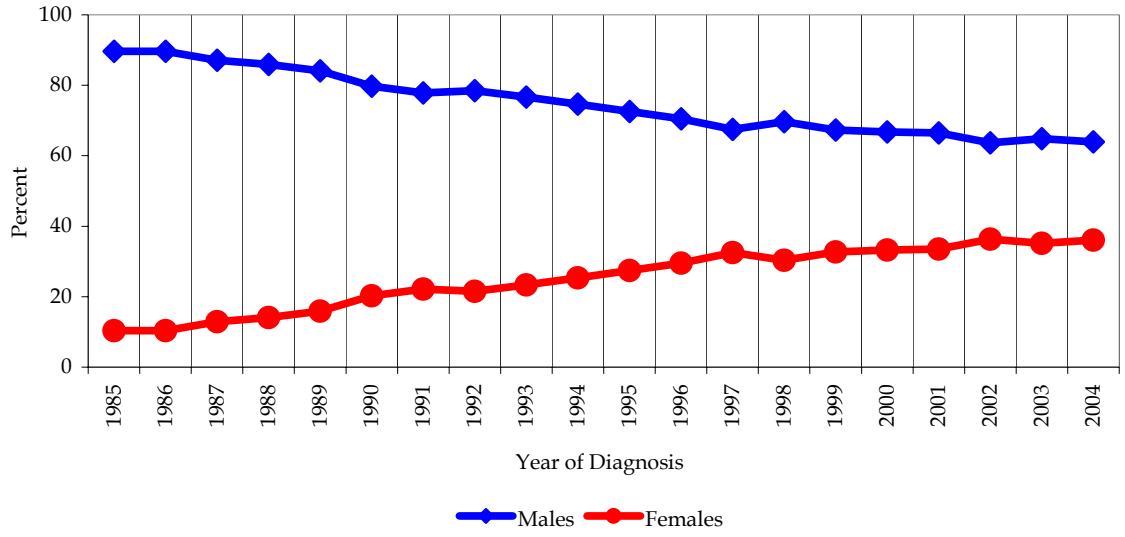
Figure 1: Proportion of HIV Cases by Year of Diagnosis and Risk



HIV/AIDS AMONG WOMEN IN MARYLAND

- When AIDS first emerged in Maryland in the 1980s, those infected were predominantly male. As the epidemic has evolved, the number of women newly diagnosed and living with HIV/AIDS has increased.
- The gender gap among AIDS cases in Maryland is gradually closing (Figure 1). In 1985, women accounted for 10.4% of diagnosed AIDS cases. Among new (incident) AIDS cases diagnosed in 2004, this proportion has more than tripled, with 36.0% of AIDS cases occurring among women.

Figure 1: Proportion of AIDS Cases by Year of Diagnosis and Gender



- In Maryland, 46.0% of living (prevalent) female AIDS cases reported injection drug use as their mode of exposure to HIV. Nationally, injection drug use exposure accounted for 34% of female AIDS cases.[1].
- In 2004, 37.8% of new (incident) HIV cases were reported among women. This percentage has remained relatively stable (between 32% and 38%) since 1994, when HIV reporting began in Maryland.
- Among newly HIV diagnosed women in 2004, 69.2% reported heterosexual exposure, 29.2% were injection drug users, and 1.6% reported other exposures.
- As of December 31, 2004, African-American women accounted for 83.5% of prevalent HIV cases among women in Maryland.

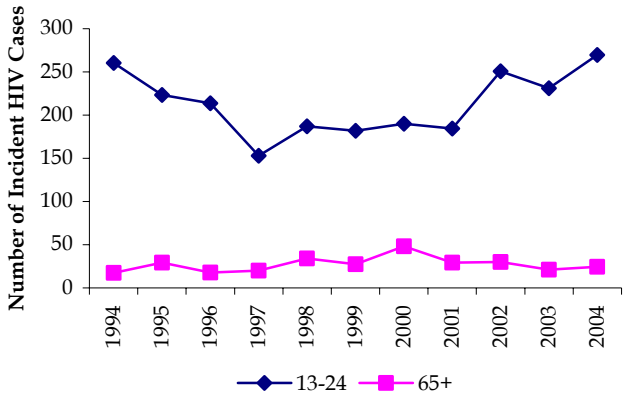
[1] Centers for Disease Control and Prevention (CDC). 2004. HIV/AIDS Surveillance Report, Year-End Edition; 16.

HIV/AIDS AMONG THE YOUTH AND ELDERLY IN MARYLAND

Youth and HIV/AIDS

- HIV incidence among youth (13-24 years of age) declined in the late 1990s but has been increasing in recent years (Figure 1). While HIV/AIDS rates among youth are low compared with adults aged 25-59, vulnerability in this population is high.
- Youth accounted for 13% of new HIV cases in Maryland in 2004. Incident HIV cases among youth are 61% male and 39% female. Among youth with a reported HIV risk category, the predominant mode of HIV transmission reported is heterosexual contact (51%), followed by MSM (39%) and injection drug use (10%).
- Youth accounted for 5% of new AIDS cases in Maryland in 2004. There were more male AIDS cases among youth than female cases (61% versus 39%). The majority of new AIDS cases among both male and female youth occurred among African-Americans (79% and 88%, respectively).
- Of the 29,123 Marylanders living with HIV/AIDS, 904 (3%) are youth ages 13-24. Of youth living with HIV/AIDS, 55% are male, and 45% are female. The majority of living cases among both males and females are African-American (86% of male cases and 85% of female cases). Half (50%) of youth living with HIV/AIDS are residents of Baltimore City and 27% are residents of Suburban Washington, D.C.
- The predominant risk factors among youth living with HIV/AIDS include heterosexual contact (33%) and MSM (26%). Injection drug use was reported less among youth living with HIV/AIDS (5%) on 12/31/2004 than among youth newly diagnosed with HIV (10%) in 2004.

Figure 1. HIV Incidence among Youth and Elderly by Year



The Elderly and HIV/AIDS

- Of the 29,123 Marylanders living with HIV/AIDS at the end of 2004, 628 (2%) are elderly (65 years and older). Of the elderly living with HIV/AIDS, 71% are male, 78% are African-American, 55% are residents of Baltimore City and 23% are residents of Suburban Washington, D.C.
- HIV incidence has remained steady among the elderly in Maryland since HIV reporting began in 1994 (Figure 1). The elderly accounted for 1% of new HIV cases in 2004. There were more new male HIV cases than new female cases in the elderly population (67% versus 33%) and more African-American HIV cases than white cases (81% versus 19%). Among elderly incident HIV cases with a reported risk category, the predominant mode of HIV transmission was heterosexual contact with a partner at known risk for HIV.
- The elderly accounted for 2% of incident AIDS cases in Maryland in 2004. Of those newly diagnosed AIDS cases among the elderly in 2004, 80% were African-American and 65% were male. Among elderly males newly diagnosed with AIDS in 2004, 85% were African-American and 15% were white. Among elderly females newly diagnosed with AIDS in 2004, 71% were African-American and 29% were white.

HIV/AIDS AND INJECTION DRUG USE IN MARYLAND

- Among prevalent (living) HIV cases in Maryland in 2004, 37% were attributed to injection drug use, 2% to MSM/IDU, and 29% to heterosexual contact with a partner at risk, which may include a partner at risk due to injection drug use. Among prevalent AIDS cases, 44% were attributed to injection drug use, 4% to MSM/IDU, and 26% to heterosexual contact with a partner at risk.
- HIV incidence (newly diagnosed cases) among injection drug users in Baltimore has been declining 12% per year since the late 1980s[1]. Because HIV and AIDS prevalence is still high, however, prevention programs must remain active as older injection drug users are more likely to be infected and to transmit the disease to younger drug users.

Race/Ethnicity, Gender, Injection Drug Use and HIV/AIDS in Maryland

- Among prevalent HIV cases with a reported risk in 2004, 37% of African-Americans and 45% of whites reported injection drug use as their probable mode of exposure.
- Thirty-eight percent of African-American males living with HIV in 2004 reported risk associated with IDU, and 32% of white males reported IDU as their mode of exposure. Thirty-three percent of African-American females living with HIV in 2004 reported risk associated with IDU, compared with 65% among white females.
- Among prevalent AIDS cases in 2004, 21% of white males were IDU-related, compared to 50% among African-American males. IDU-related AIDS cases were similar for African-American females (45%) and white females (55%).

Men who have Sex with Men (MSM), Injection Drug Use, and HIV/AIDS in Maryland

- Young, minority men who have sex with men who also inject drugs are at particularly high risk for HIV/AIDS. While this group is a small proportion of the overall population, HIV incidence among this group is very high[2].
- Men who have sex with men (MSM) represented the highest percent HIV positivity (6.6%) among those testing at Counseling, Testing and Referral (CTR) sites in Maryland in 2004.

Drug Related Behaviors, HIV/AIDS, and the Needle Exchange Program in Maryland

- Drug-related behaviors associated with an increased risk of HIV infection include frequent drug injection; sharing of injection paraphernalia; and participation in shooting galleries, locations where individuals share drugs and injection paraphernalia.
- In response to the HIV crisis among injection drug users, Baltimore City established a Needle Exchange Program (NEP) in 1994 that has dispensed over 2 million syringes to IDUs through two mobile vans that visit communities particularly hard hit by substance use and HIV/AIDS. This program, which serves over 8,000 participants, acts as a bridge to drug treatment for many participants. Evaluations of the NEP have shown reductions in HIV incidence and HIV-related risk behavior among program participants. This program is supported by the AIDS Administration and is part of the statewide prevention strategies for IDUs.

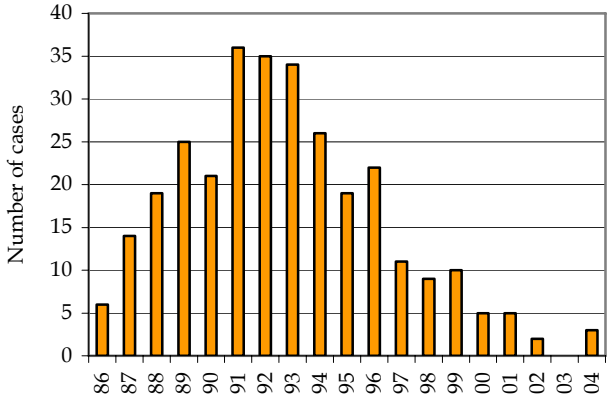
[1] Nelson KE, Galai N, Safaeian M, Strathdee SA, Celentano DD, Vlahov D. 2002. Temporal Trends in the Incidence of Human Immunodeficiency Virus Infection and Risk Behavior among Injection Drug Users in Baltimore, Maryland, 1988-1998. Am J Epidemiol; 156(7):641-53.
[2] Centers for Disease Control and Prevention (CDC). 2002. Unrecognized HIV infection, risk behaviors, and perceptions of risk among young black men who have sex with men – Six U.S. Cities, 1994-1998. MMWR.; 51:733-736.

- In 1994, ACTG Protocol 076 demonstrated that the risk of mother to child HIV transmission could be reduced by two-thirds if zidovudine (ZDV or AZT) was administered during the perinatal period (pregnancy, labor, delivery) and to the child after birth. In response, the US Public Health Service (PHS) recommended use of ZDV by HIV infected pregnant women to reduce perinatal HIV transmission and in 1995, routine HIV counseling and voluntary prenatal testing. Maryland law requires mandatory counseling and voluntary testing of all pregnant women.

- From the beginning of the epidemic through 2004, a total of 9,381 children <13 years of age had been diagnosed with AIDS in the United States, and in 2004, an estimated 1,695 children <13 years of age were living with AIDS.[1]

- There has been a marked decline in pediatric AIDS cases nationally and in Maryland since 1992. There have been a total of 312 pediatric AIDS cases diagnosed in Maryland. The number of pediatric cases peaked in 1991 and has been decreasing since that year with the exception of a slight rise in 1996. See Figure 1.

Figure 1: Maryland Incident Pediatric AIDS Cases by Year of Diagnosis, N=312



- Examination of pediatric HIV cases by year of birth provides a better estimate of perinatal HIV transmission. There were 24 children infected with HIV born in 1998, and there were 5 children infected with HIV born in 2003 statewide.

- In Maryland there are an estimated 226 children living with HIV/AIDS. Pediatric cases represent 0.8% of living HIV/AIDS cases in Maryland.

- While the number of women of childbearing age (13-49 years) living with HIV has been increasing in Maryland, the number of babies born to HIV-infected women has decreased from 1998-2000.

- Of women of childbearing age (13-49 years) living with HIV/AIDS, 81% are African-American race/ethnicity, 48% are residents of Baltimore City and 24% are residents of suburban D.C.

- African-American women are representing an increasing proportion of new HIV and AIDS cases each year. Of African-American AIDS cases, women represented 14% in 1985 and 39% in 2004. The majority of perinatally HIV-exposed and infected babies were born to African-American women.

[1] Centers for Disease Control and Prevention (CDC). 2004. HIV/AIDS Surveillance Report, Year-End Edition; 16.

LIST OF ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
CDC	Centers for Disease Control and Prevention
CTR	Counseling, Testing and Referral
DOC	Division of Correction
HetSex PI	Heterosexual contact with a person of indeterminate risk
HetSex PR	Heterosexual contact with a person with or at risk for HIV/AIDS
HIV	Human Immunodeficiency Virus
IDU	Injection drug user/Injection drug use
MSM	Men who have sex with men
MSM/IDU	Men who have sex with men and inject drugs
OI	Opportunistic infection
PLWHA	Person living with HIV and/or AIDS
PLWA	Person living with AIDS
RNS	Risk not specified
STD	Sexually transmitted disease
TB	Tuberculosis
UI	Unique identifier

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